Program Entry Guide





Program Entry Guide

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How to Use this Program Entry Guide

1.0 Introduction

1.1 How to use this Program Entry Guide

This guide addresses the programming of the D7212G Control/Communicators only, and should not be used in conjunction with other panels.

1.2 Other Literature Referenced

Throughout this guide, references will be made to other documentation. See *Table 1* below for a listing of the part numbers for ordering purposes.

Bosch Security Systems recommends reading the following documents before installing and programming the products:

Name of document	Part Number
D1255 Installation Instructions	74-06819-000
D1256/D1257 Installation Instructions	74-06925-000
D1260 Installation Guide	48101
D1260 Owner's Manual	50410
D5200 Operation Manual	74-06176-000
D6500 Report Directory	74-04651-001
D6600 Communications Receiver/Gateway Computer Interface Manual	39963
D720 Installation Instructions	74-06918-000
D7212G Operation and Installation Guide	4998138544
D7212G Program Record Sheet	4998138542
RAM IV Operation Manual	38849

Table 1: Other Literature Referenced

1.3 Documentation Conventions

1.3.1 Type Styles Used in this Guide

To help identify important items in the text, the following type styles are used:

Bold text	Usually indicates selections that you may use while programming your panel. It may also indicate an important fact that should be noted.
Italicized text	Is used to reference the user to another part of this guide or another guide entirely. It is also used to symbolize names for records that the user will create.
Courier Text	Text that appears like this indicates what may appear on the Remote Programmer's display, command center/keypad or internal printer.
[CAPITALIZED TEXT]	Text like this is used to indicate to the user that a specific key should be pressed.
Italicized Text	Text that appears like this indicates what would be seen in the Remote Programmer's Display. It is used as a section heading and screen example. Shaded boxes indicate programmer prompts that are only available when Custom or View Events are selected.
Italicized Text	A thick border is used to indicate a main programming entry.
Italicized Text	A heavy dashed border is used to indicate a sub entry that is under a main programming entry.

Introduction

Documentation Conventions

1.3.2 Tips, Notes, Cautions and Warnings

Throughout this document helpful tips and notes will be presented concerning the entire application and/or programming the unit. They will be set off as follows:



These are helpful shortcuts or reminders in using the unit.



These are notes and clarifications of different aspects of the application.



These cover notes and clarifications specific to programming the unit.



These are helpful shortcuts or reminders in programming the unit.



These notes should be heeded for successful operation and programming.



These warn of the possibility of physical damage to the operator, program and/or equipment.



These caution the operator that physical damage to the program and/or equipment may occur.

Product Handlers

1.4 Product Handlers

The programming of the D7212G requires multiple product handlers. The availability of each handler is indicated in *Table 3.* Please refer to the panel specific *Release Notes* to determine the most up-to-date handler versions.

Product Handler	Functionality	D7212G
9000MAIN	Covers Panel Wide, Area, Command Center Function List, User Interface, and Relay programming modules.	√
RADXUSR1	Covers Passcode/Token programming for Users 000 through 99.	√
RADXPNTS	Covers Point Index and Point Assignment programming for all points.	√
RADXSKED	Covers Open/Close Windows, User Access Windows, Skeds, and Holiday Index programming modules.	~
RADXAUX1	Covers SDI Automation, SDI RAM Parameters, Enhanced Communication Parameters, Route Group Attempts, Miscellaneous, and Cross Point Parameters.	√

Table 2: Product Handlers



Although the handlers shown above can be used to program any of the new D7212G Control/Communicators, not all of the functions will operate. For example, the RADXUSR1 Handler is used to program users 000 through 124. Even though the handler allows you to program users 100 through 124, the D7212G will not allow the activation of these users.

1.5 Programming Options

The *Program Entry Guide* has been set up in a specific order. Related program entries are grouped together in modules as they appear in the specific product handlers. The handler and the programming module are listed at the top of each page to help you find specific programming prompts.

The *Program Entry Guide* shows the programming options for each product handler. Each option is listed with:

- The program item Prompt. Each Prompt is shown, as it will appear in the D5200 Programmer, see the D5200 Programmer Manual, (P/N: 74-06176-000) or the Remote Account Manager, see the RAM IV Operations Manual, (P/N: 38849). Sometimes, for space considerations, a Prompt must be abbreviated in the Programmer display. In these cases, the meaning of the prompt is explained in the Description.
- Program Entry Default setting. Since defaults are set for the typical installation, you may not need to
 program each prompt. Review the default entries in the *Program Record Sheet* shipped with the panel to
 determine which prompts need to be programmed.
- Program Entry Selections. Only the selections listed can be used for a particular program item. The programmer does not accept inappropriate entries.
- Program Entry Description. This provides concise information regarding what can occur with the various entry selections. Read the Descriptions carefully as misunderstanding can result in improperly programmed equipment.
- Custom Programming. A new feature of the D5200 Programmer is the option to select Custom programming Yes or No] to expand programming modules within the D5200. Programming Custom as Yes does not affect the programming of any parameter. It allows parameters for special applications to be visible in the programmer.

Documentation Conventions

1.6 Programming the Panel with the D5200 Programmer

- 1. Latch the jumper in the upper right hand corner of the panel labeled as "RESET" on the PCB and "Reset Pin" on the faceplate.
- Connect the molex end of the cord to the connector labeled as "PROG" on the PCB and "PROG CONN" on the faceplate.
- 3. Always initiate a panel copy at the NEW RECORD prompt or FILENAME when pressing the [RECV] (copy) key of the D5200.
- 4. Always initiate a panel load within the FILENAME or to set as factory default within the NEWRECORD when pressing the [SEND] (load) key.
- 5. Disconnect the D5200 prior to releasing the "RESET" pin or the SDI devices will go into trouble and display CALL FOR SERVICE.



Do not leave the D5200 connected to the PROG connector without the "RESET" pin latched. Doing so will cause SDI ## TROUBLE reports and CALL FOR SERVICE to display on the command centers. Door controllers will also activate depending upon the SDI failure dipswitch setting.

1.6.1 Programming Error Displays

INCOMPATIBLE PANEL You are connected to the wrong panel or using the wrong handler. Check the

faceplate for the model number and the handler title.

CHECK CORD/RESET Check the cord and "RESET" pin



There will be a 5 to 25 second pause after the "RESET" pin is unlatched during which the panel scans all the points and properly displays, logs and reports them.

Phone

2.0 9000MAIN

Use this programming module to define the operating characteristics that affect panel wide functions. There are nine programming categories in this module: *Phone, Phone Parameters, Routing, Enhanced Communications, Area Parameters, Command Center, User Interface, Function List, and Relay Parameters.*

2.1 Phone

The panel can dial up to four different telephone numbers when sending event reports. All telephone numbers use the same receiver format. Event report routing and communication protocols are discussed in *Section 2.3 Routing on page* 16.

Phone 1

Default: (Blank)

Selections: Up to 24 characters (do not enter [SPACE])

This is the telephone number the panel dials to contact the central station receiver when sending event reports. This number is "Phone 1" which is referenced in *Routing* parameters.

The panel is pre-programmed with a 7 second dial tone detect period. When dial tone is detected or the waiting period ends, the panel begins to dial. To extend the dial tone detect program, place a D before the phone number. To insert a pause during or after dialing, use C in the number sequence. For example, if the panel hangs up before it hears the Modem IIIa² Ack tone from the D6500/D6600, program extra Cs after the phone number. The panel waits on line for three extra seconds for each C programmed.

Enter up to 24 of the following characters to define dialing characteristics.



Using both Phone data entry lines: The first line of the phone number data entry line must be filled (twelve characters) before you press the [ENT] key to move on to the second line. If you enter characters on the second line, and there are less than twelve characters on the first line, the second line clears when you press [ENT].

0 - 9	Numbers zero through nine
С	3 second pause
D	7 second dial-tone detect.
# or *	Used for the same purpose as pressing this key on a telephone keypad when manually dialing. For example, an asterisk (*) may be needed to access your long distance service. Do not use these characters when pulse dialing.
(Blank)	Panel dials no phone number.
	Programming this item (Blank) does not disable phone routing. To disable reporting to this phone refer to <i>Section 2.3 Routing</i> on page 16.

Table 3: Phone Number Data Entries

Phone 2

Default: (Blank)

Selections: Up to 24 characters (do not enter [SPACE])

(See explanation of *Phone 1*.) This number is "Phone 2" which is referenced in *Section 2.3 Routing* on page 16.

Phone 3

Default: (Blank)

Selections: Up to 24 characters (do not enter [SPACE])

(See explanation of *Phone 1*.) This number is "Phone 3" which is referenced in *Section 2.3 Routing on page 16*.

9000MAIN

Phone Parameters

Phone 4

Default: (Blank)

Selections: Up to 24 characters (do not enter [SPACE])

(See explanation of *Phone 1*.) This number is "Phone 4" which is referenced in *Section 2.3 Routing* on page 16.

2.2 Phone Parameters

The program items in this category describe panel wide characteristics for telephone dialing, receiver format, and supervision.

Modem Format

Default: Yes Selections: Yes or No

Central Station Receiver Format for transmission of reports. Modem format provides many reporting advantages over the BFSK format. See the *D6500/D6600 Report Directory* for more information about the effect of reporting formats.

	1 0
Yes	Modem IIIa ² Communication Format.
	Modem IIIa ² Communication Format reports identify points as "001" through "040" and passcode User ID codes as "000" through "099" at the D6500/D6600 Receiver (unless <i>Point/User Flag</i> is programmed Yes; see below). When reporting point events, Modem IIIa ² Communication Format also sends point text to the D6500/D6600 as programmed in <i>Point Assignments</i> .
No	BFSK (2300 Hz or 1400 Hz acknowledgment tone).



Modem Format must be set to Yes when sending events over a network to a D6600 receiver (NetCom).



If Modem Format is No, be sure to assign a number to identify duress reports in BFSK Duress Code in this programming section.

Point/User Flag

Default: No Selections: Yes or No

This program item determines how point and User ID numbers are presented at the D6500/D6600 display, printer, and computer RS232 output.

When *Modem Format* is Yes, the panel sends expanded Modem IIIa² Communication Format reports to the D6500/D6600. If your central station data files are not set up for point and User ID number reporting, you can use this program item to convert these numbers to COMEX reports.

Yes	The panel sends a "flag" with each report that tells the D6500/D6600 to convert point numbers and User ID numbers to COMEX format. The conversions are shown in <i>Table 4</i> on page 13. [No matter how the D6500/D6600 is programmed for output to the computer system, points and User ID numbers are converted when this item is Yes . (See the <i>D6600 Communications Receiver/Gateway Computer Interface manual, Appendix C, Numbered Table & Note 1</i> .)]
No	The panel does not send the "flag." The D6500/D6600 outputs point numbers as 001 - 040 (rather than 100 - 216) and User ID numbers as 000 - 099 (rather than 000 - F08), as indicated in <i>Table 4</i> on page 13.

When *Modem Format* is Yes, the panel sends expanded Modem IIIa² Communication Format reports to the receiver. *Point/User Flag* affects Modem IIIa² Communication Format data as shown below. The Bosch Security Systems D6500/D6600 Receiver adds the leading zero in the User ID Number with Point/User Flag programmed No.

Phone Parameters

User ID Numbers	
Point/User Flag	
No	Yes
000	000
001 - 005	001 - 005
006 - 013	601 - 608
014 - 021	701 – 708
022 - 029	801 – 808
030 - 037	B01 – B08
038 - 045	C01 – C08
046 - 053	D01 -
	D08
054 - 061	E01 – E08
062 - 069	F01 – F08
070 - 099	000

Point Numbers	
Point/User Flag	
No	Yes
001 - 008	100 - 800
009 - 024	101 – 116
025 - 040	201 - 216

Table 4: Modem IIIa² Communication Format data

Independent Zone Control Notice: When using Independent Zone Controls (I.Z.C.) to send opening/closing reports by point, do not duplicate reporting independent point numbers with User ID reports (refer to *Section 3.1 Passcode Worksheet* on page 83). For example: If an I.Z.C. is connected to point 8, User ID 8 should not be used.

 $\textbf{D6000:} \ \ \text{Opening/Closing User ID numbers are identified at the receiver as "ZONEs" (same identification as independent points).}$

User ID $1 = ZONE B$	User ID $6 = ZONE 6$	User ID $93 = ZONE 3$
User ID 2 = ZONE C	User ID $7 = ZONE 7$	User ID 94 = ZONE 4
User ID 3 = ZONE D	User ID 8 = ZONE 8	User ID 95 = ZONE 5
User ID 4 = ZONE E	User ID 91 = ZONE 1	User ID 96 = ZONE 0
User ID 5 = ZONE F	User ID 92 = ZONE 2	

D6500/D6600 Receiving BFSK format: Opening/closing User ID numbers are identified at the receiver as "ZN" (same identification as independent points). The "ZN" numbers are based on the "tens" digit of the User ID number. This only applies for Users 000 through 099.

DTMF Dialing

Default: Yes Selections: Yes or No

Use DTMF (dual-tone multi-frequency) to dial the central station receiver phone number(s) for event reports, and/or the RAM IV Remote Account Manager.

Yes	Dials the programmed phone number(s) using DTMF.	
No	Pulse Dialing only	

Phone Parameters

Phone Supv Time

Default: (Blank)

Selections: (Blank) or 10 - 240

The panel tests the primary phone line approximately nine times a minute and the secondary line once a minute. This prompt sets the amount of time the panel continues to monitor a faulted phone line before initiating phone line trouble responses.

(Blank)	No phone line supervision.	
10 - 240	Enter the number of seconds (in 10 second increments) you wish to supervise the phone line. After a faulted phone line restores, it takes the same amount of time to initiate restoral responses.	

Phone line trouble responses:

Command centers display SERVC PH LINE # to indicate which phone line failed. The command center will initiate a trouble tone if *Buzz on Fail* is **Yes** and *CC Trouble Tone* is **Yes**.

Phone trouble and restoral events report when they occur. They report also when a diagnostic report is initiated from a command center or by a Sked.

Alarm On Fail

Default: No Selections: Yes or No

Yes	Generate alarm responses when a phone line fails.	
No	Phone failures will report as trouble responses for Area 1 and/or the account number for Area 1.	



Phone Supv Time must be programmed to use this feature.



Phone Failure Alarm Responses: The Alarm Bell relay for Area 1 activates. All phone event messages report as Area 1 and/or the account number for Area 1.

Buzz On Fail

Default: No Selections: Yes or No

Yes	Generate panel wide trouble tones and display PHONE FAIL # at command centers when a Phone Fail event occurs.
No	Does not generate trouble tones at command centers when a Phone Fail event occurs. PHONE FAIL # will still display.



Phone Supv Time must be programmed to use this feature.



How to de-select individual command centers for panel wide trouble tones. Panel wide trouble tones for programming CC can turn off individual command centers (based on their CC # 1 through 8) # Trouble Tone in Command Center Parameters as No.

Phone Parameters

Two Phone Lines

Default: No

Selections: Yes or No

Note: Not available with D7212G. Leave default.

BFSK Duress Code

Default: 0 Selections: 0-9

If *Duress Enable* in *Area Parameters* is **Yes** and *Modem Format* in *Phone Parameters* is **No**, you must program a number to identify duress reports at the central station.

Expand Test Rpt

Default: No Selections: Yes or No

This program item is used to add system event information to scheduled test reports. Test reports are set up as scheduled events in the *Skeds Parameters* section of the program.

Yes	Report events listed in routing group test reports will report to the central station if they are off-normal.
No	Does not report off-normal conditions for the events listed in the routing group test reports at test time.



This parameter is related only to Sked Function Code 9 (Test Report) and whether this Sked will transmit Expanded Test Report information or not. It does NOT have any bearing on Sked Function Codes 28 (Expanded Off-Normal Test Report) and 29 (Non-Expanded Off-Normal Test Report).

Ground Start

Default: Long

Selections: Short or Long

Some newer ground start telephone exchange switches require a shorter amount of time to initiate dial tone. If the panel can't initiate a dial tone on the ground start line with the default (Long) setting, try the Short setting.

Long	Standard duration of ground. Use this setting for most ground start telephone systems. The duration is 700 milliseconds.	
Short	Shorter duration of ground. Use this setting for telephone systems where specified. The duration is 250 milliseconds.	

Press the [SPACE] bar to scroll through the selections. Press [ENT] when the correct selection appears in the display.



Use this program item only when the panel is connected to Ground Start telephone lines. Ground Start is not allowed on UL Listed Systems.

2.3 Routing

Routing lets you select full or partial groups of events to be reported to up to four different destinations. Routing includes choosing which is the most important destination, (Route #), which events are reported to a single or multiple destination and if the events fail, which backup destination should be selected.

2.3.1 Called Party Disconnect

Telephone companies provide "called party disconnect" to allow the called party to terminate a call. The called party must go on hook (hang up) for a fixed interval before a dial tone is available for a new call. This interval varies with telephone company equipment. D7212G firmware allows for "called party disconnect" by adding a 35 second "on hook" interval to the dial tone detect function. If the panel does not detect a dial tone in 7 seconds, it puts the phone line on hook for 35 seconds to activate "called party disconnect," goes off hook and begins a 7 second dial tone detect. If no dial tone is detected, the panel dials the number anyway. Each time the number is dialed, the panel records this as an attempt. After ten attempts the panel goes into Communications Failure and Comm Fail Route # is displayed on the command centers.

2.3.2 Route # Groups, which has the highest priority?

To program a group, you first choose a *Route #*. The lower the *Route #* number, the higher priority that group will have (e.g., events reported for Route 1 have a higher priority than Route 2, 3 or 4 if each group has a message to send at the same time). This will become important when programming duplicate reports or choosing which events you want to ensure will report *first* regardless of the number of events that need to be reported to multiple groups.

Remember that Route 1 group Primary Device will be the first destination that the panel will attempt to dial *if an event in that group needs to be reported.* If the panel is idle, any event generated for any group will initiate a dialing sequence.

2.3.3 Programming a Primary and Backup Destination

Each *Route* # has an *R# Primary Device* and an *R# Backup Device*. In typical applications where two phone numbers are programmed, the *R# Primary Device* destination is the *Phone* # that the Route Group will attempt to dial first. If the *R# Primary Device* destination fails to connect to the central station receiver after two dialing attempts, then the *R# Backup Device* destination will be dialed. In addition to this, the control panel can be programmed such that the *R# Primary Device* and/or the *R# Backup Device* can be an SDI device, such as a D9133TTL-E Network Interface Module. The control panel can also be programmed to attempt only once for the *R# Primary Device* before attempting to send events using the *R# Backup Device*.

2.3.4 Enhanced Routing

The D7212G allow events to be transmitted to up to four Phone Numbers and/or "SDI Paths". The D9133TTL-E Network Interface Module (with Ethernet) connects directly to the SDI Bus and occupies SDI Address 88. For additional information regarding the specific programming requirements for enhanced communications, refer to Section 2.4 Enhanced Routing on page 24 and Section 6.4 Enhanced Communications on page 135.

2.3.5 Programming a Duplicate report

To allow an event within a group to report to multiple groups, the event should be **Yes** for each *Route* # available. For instance, programming Fire Alarms for Route Group 1 and Route Group 2 will result in the fire alarms *first* reporting to Route Group 1 followed by a duplicate report to Route Group 2.

2.3.6 Routing Destination Communication Failures

When the $\it{R\#Primary Device}$ fails to connect with the central station after one or two attempts (see also $\it{RG\#1}$ Attempt), the $\it{R\#Backup Device}$ Phone # or SDI Path will be attempted. The central station will receive the original event with a COMM FAIL PHONE# = (1, 2, 3, or 4) if the $\it{R\#Primary Device}$ destination is a phone number. If the $\it{R\#Primary Device}$ is an SDI Path, the central station will receive the original event with

A COMM FAIL RG# SDI## (SDI Path 1=88, SDI Path 2=89, SDI Path 3=90, SDI Path 4=91). When all attempts to both the R# Primary Device and R# Backup Device have failed, a COMM FAIL RG# event is generated. Comm Restore events are not generated.

2.3.7 Message Prioritization within a Route

Fire alarm events have the highest priority and are reported first for each group. The next highest priority events are in the following order, panic, duress, medical, intrusion ala

rm, supervisory and then all troubles and restorals.



To comply with NFPA and UL985, you must program Route 1 to report only Fire Alarm events to ensure the fastest reporting time.

2.3.8 Dialing Attempts

The D7212G panel has a prompt called RG# 1 Attempt located in Section 6.5.1 Route Group Attempts in the RADXAUX1 handler on page 140.

If this item is set to No the panel will make a total of six individual attempts to make contact using the primary device within a Route Group and then will make a total of four attempts to make contact using the backup device before initiating a Comm Fail report. When only one destination is programmed, the panel will make ten attempts to contact that destination. Each group takes approximately 10 minutes to go into Comm Fail.

However, if this item is set to **Yes**, the panel will only make <u>one</u> attempt (instead of two) to contact the primary device before attempting to contact the backup device. The Route Group still makes a total of ten attempts; however, the Primary Device makes five attempts and then the Backup Device makes five attempts.

Route

Default: 1 Selections: 1 – 4

Enter the number specifying the route group to be programmed. The route represents the group you wish to send a group of reports. The groups are prioritized with "1" being the first group to be reported and "4" being the last group to be reported. Each group has a Primary and a Backup device. The Primary Device is the first (most important) destination used to reach the programmed route within this group. The Backup Device is used if the Primary Device fails.

1	First group sent
2	Second group sent
3	Third group sent
4	Fourth group sent

R# Primary Device

Default: (Blank) Selections: (Blank), 1 - 4

Enter the number specifying the Primary Device.

1	Phone 1 or SDI Path 1 is this group's primary destination.	
2	Phone 2 or SDI Path 2 is this group's primary destination.	
3	Phone 3 or SDI Path 3 is this group's primary destination.	
4	Phone 4 or SDI Path 4 is this group's primary destination.	

9000MAIN

Routing

R# Backup Device

Default: (Blank) Selections: (Blank), 1 - 4

Enter the number specifying the Backup Device. The Backup Device is used when the Primary Device fails to reach the programmed destination.

1	Phone 1 or SDI Path 1 is this group's backup destination if the primary destination fails.
2	Phone 2 or SDI Path 2 is this group's backup destination if the primary destination fails.
3	Phone 3 or SDI Path 3 is this group's backup destination if the primary destination fails.
4	Phone 4 or SDI Path 4 is this group's backup destination if the primary destination fails.

View Events?

Default: No Selections: Yes or No

Allows the D5200 Programmer to reveal the prompts shown below in shaded borders. Leaving *View Events?* as No allows the user to ignore a large area of programming that may not need to be changed.

Yes	Allows the user to access each routing group and program individual events for this <i>Route Group</i> only. (D5200)
No	Allows the user to continue programming without viewing individual groups.

Fire Reports

Selecting Yes enables a report to be sent when the event occurs.

Report	Selections	Description
R# Fire Alarm	Yes, No	Reports fire event.
R# Fire Restore (Alarm)	Yes, No	Reports fire restoral from alarm.
R# Fire Missing	Yes, No	Reports missing fire point.
R# Fire Trouble	Yes, No	Reports fire trouble.
R# Fire Supervis	Yes, No	Reports fire supervision.
R# Fire Restore (T/M/S)	Yes, No	Reports fire restoral from trouble, missing, or bypass.
R# Fire Cancel	Yes, No	Reports canceled fire alarm.
R# Fire Sup Miss	Yes, No	Report fire supervisory missing.
R# Fire Supv Rest [†]	Yes, No	Reports restorals from Fire Supervision.

[†] This event does not get reported when using BFSK format.

Table 5: Diagnostic Reports

Burglar Reports

Selecting Yes enables a report to be sent when the event occurs.

Report	Selections	Description
R# Alarm Report	Yes, No	Report burglar alarm event.
R# Burg Restore	Yes, No	Reports non-fire restoral from trouble, missing, or supervisory.
R# Duress	Yes, No	Duress report.
R# Missing Alarm	Yes, No	Reports missing alarm point.
R# Usr Code Tmpr	Yes, No	Reports user code tamper.
R# Trouble Rpt	Yes, No	Reports trouble event.
R# Missing Trbl	Yes, No	Reports missing trouble event.
R# Non Fire Suprv	Yes, No	Reports non-fire supervision event.
R# Pt Bus Fail	Yes, No	Reports point bus failure.
R# Pt Bus Rstl	Yes, No	Reports restoral of point bus after failure.
R# Non Fire Cncl	Yes, No	Reports canceled non-fire alarm.
R# Alarm Restore	Yes, No	Reports non-fire restoral from alarm.
R# Sup Missing	Yes, No	Reports supervisory missing.
R# Unverfied Evt ^{†*}	Yes, No	Reports Unverified events for Cross Points.

[†] This event does not get reported when using BFSK format.

Table 6: Burglar Reports



The Unverified Event will be transmitted when a single point programmed in Cross Point Group faults into an alarm condition then restores before the Cross Point Time elapses. This event encompasses both fire and non-fire points. It is not, however, related to the Verify Time used for smoke detectors.



Restoral reports will not be sent if the panel is reset after a point is bypassed and then the point is unbypassed. This is true for both fire and non-fire points.

The D7212G Control/Communicator logs a Ground Fault event as a Trouble Point 256.

^{*} This event will not produce a corresponding Restoral event.

User Reports

Selecting Yes enables a report to be sent when the event occurs.

Report	Selections	Description
R# Point Bypass	Yes, No	Reports point bypass event.
R# Forced Point	Yes, No	Reports forced point event.
R# Point Open	Yes, No	Reports point opening event.
R# Point Close	Yes, No	Reports point closing event.
R# Forced Arm	Yes, No	Reports point forced armed.
R# Fail To Open	Yes, No	Reports fail to open event.
R# Fail To Close	Yes, No	Reports fail to close event.
R# Ext Clos Tm	Yes, No	Reports extend close time event.
R# Opening Rpt	Yes, No	Reports opening events.
R# Forced Close	Yes, No	Reports point forced close event
R# Closing Rpt	Yes, No	Reports closing events.
R# FC Perim Inst	Yes, No	Reports forced close perimeter instant armed event.
R# FC Perim Delay	Yes, No	Reports forced close perimeter delay armed event.
R# Perim Inst Arm	Yes, No	Reports perimeter instant armed event.
R# Perim Delay Arm	Yes, No	Reports perimeter delay armed event.
R# Send User Text	Yes, No	Reports user text.

Table 7: User Reports

Test Reports



To send a single test report [R# Test Report], enable Sked Function Code #9 [Test Report] in the Skeds section of the program.

To expand this test report to include any off-normal point condition or other off-normal conditions of events listed in Diag Reports as a non-status event following a test report, Expand Test Rpt in Section 2.2 Phone Parameters, page 12 must be programmed Yes.

Events R# Log Threshold, R# Log Overflow, and R# RAM Fail will be added to the reports sent with Expanded Test Reports if they are enabled in RAM Reports and Expand Test Rpt is also enabled.

To initiate a status report, which includes all R#S: _____ events as a status report [as opposed a non-status report], Sked Function Code #10 must be enabled in the Skeds section of the program.

Reporting off-normal conditions as a status report following a test report is required by some automation systems. Reporting off-normal conditions as a non-status report, which follows a test report, is required for other automation systems.

An off-normal condition is any point, which is missing, trouble, supervisory, or in alarm [as opposed to normal]. Also, points that have not been cleared at the command center will report as off-normal.

Expanded Off-Normal Test Report can be generated by using Sked Function Code 28 or a Non-Expanded Off-Normal Test Report using Sked Function Code 29. In order to generate this event, one or more points must be in an off-normal state at the time the Sked executes. Expanded Off-Normal Test Reports include the Off Normal Test Report event as well as events for any points that are in an off-normal state at the time the report is generated. Non-Expanded Off-Normal Test Report events are only sent when any point is in the off-normal state but only sends the Off Normal Test Report event.

Report	Selections	Description
R# S: Alarm	Yes, No	Status alarm report.
R# S: Trouble	Yes, No	Status trouble report.
R# S: Supervised	Yes, No	Status supervised report.
R# Status Report	Yes, No	Status report.
R# S: Open	Yes, No	Status open report.
R# S: Close	Yes, No	Status close report.
R# Test Report	Yes, No	Test report.
R# S: Perim Inst	Yes, No	Status perimeter instant arm report.
R# S: Perim Delay	Yes, No	Status perimeter delay arm report.
R# S: Fire Supv	Yes, No	Status fire supervision report.
R# S: Fire Alarm	Yes, No	Status fire alarm report.
R# S: Fire Trbl	Yes, No	Status fire trouble report.
R# S: Msng Fire	Yes, No	Status fire missing report.
R# S: MsngBurgTr	Yes, No	Status burg missing trouble report.
R# S: MsngBurgAl	Yes, No	Status burg missing alarm report.
R# S: FireSpMsng	Yes, No	Status fire supervision missing report.
R# S: SuperMsng	Yes, No	Status non-fire supervision missing report.
R# S: DrLeftOpen*	Yes, No	Status door left open report.

^{*}Event not transmitted with D7212G. Leave set to default.

Table 8: Test Reports Diag Reports

Selecting **Yes** enables a report to be sent when the event occurs. If the off-normal state of the following events (indicated with a *) still exist, they report when a *Test Report* [see *Table 9*] is initiated and *Expanded Test Rpt* is programmed **Yes**.

	~ 1	
Report	Selections	Description
R# SDI Dev Fail*	Yes, No	Reports SDI device failure.
R# SDI Dev Restl	Yes, No	Reports restoral of SDI device failure.
R# Watchdog Rset	Yes, No	Reports watchdog reset event.
R# ParaChksmFail	Yes, No	Reports parameter checksum failure.
R# Reboot	Yes, No	Reports reboot event.
R# Ph Line Fail*	Yes, No	Reports failure of phone line.
R# Ph Line Rstl	Yes, No	Reports restoral of phone line after failure.
R# AC Fail*	Yes, No	Reports failure of AC power to panel.
R# AC Restorl	Yes, No	Reports restoral of AC power to panel after failure.
R# Batt Missing*	Yes, No	Reports battery missing detection event.
R# Battery Low*	Yes, No	Reports low battery power.
R# Battery Rstl	Yes, No	Reports restoral of battery power to panel after missing or low event.
R# Rt Comm Fail* [†]	Yes, No	Reports failure to send report to specific route.
R# Rt Comm Rstl	Yes, No	Reports restoral of communication to specific route after a failure.
R# Checksum Fail	Yes, No	Reports checksum fail event.
R# Network Fail ^{††}	Yes, No	Reports failure of network.
R# Network Rest ^{⁺†}	Yes, No	Reports restoral of network.
R# Network Cond**	Yes, No	Reports condition of network.

[†] This event covers Comm Fail Route Group and Comm Fail Phone. If enabled, both events are sent; if disabled, neither event is sent; ^{††} This event reserved for future use.

Table 9: Diagnostic Reports



Bosch Security Systems recommends that Rt Comm Fail and Rt Comm Restore only be turned on in one Route Group.

Relay	Repor	ts		

Selecting Yes enables a report to be sent when the event occurs.

Report	Selections	Description
R# Sensor Reset	Yes, No	Reports sensor reset event.
R# Relay Set	Yes, No	Reports relay set event.
R# Relay Reset	Yes, No	Reports relay reset event.

Table 10: Relay Reports

Note: When activating an on-board relay via PC9000, the D7212G panel will log and print the event as Relay 250 (Relay A), Relay 251 (Relay B), Relay 252 (Relay C).

AutoFunc Reports

The following prompts support customized routing of Auto Function Reports. Selecting **Yes** enables a report to be sent when the event occurs.

Report	Selections	Description
R# Sked Executed	Yes, No	Reports Sked executed event.
R# Sked Changed	Yes, No	Reports Sked changed event.
R# Execute Fail	Yes, No	Reports a fail to execute event.

Table 11: Auto-Function Reports

RAM Re	ports		

Selecting Yes enables a report to be sent when the RAM Passcode event occurs.

Note: RAM Access Fail may indicate a wrong RAM passcode when communicating with the panel, or a valid RAM session was terminated by a means other than a GOOD-BYE or RESET-BYE command. Remote Reset indicates a RESET-BYE command issued from RAM, Bad Call to RAM indicates that the panel called RAM but was unable to connect.

Report	Selections	Description
R# Log Threshold	Yes, No	Reports Event log threshold reached.
R# Log Overflow	Yes, No	Reports Log is full, old events will be overwritten.
R# Para Changed	Yes, No	Reports RAM parameter change event.
R# RAM OK	Yes, No	Reports successful RAM access event.
R# RAM Fail	Yes, No	Reports failed access RAM event.
R# Remote Reset	Yes, No	Reports remote reset event.
R# Program OK	Yes, No	Reports successful laptop access event.
R# Program Fail	Yes, No	Reports failed laptop access event.

Table 12: RAM Reports

Point Reports

Selecting **Yes** enables a report to be sent when the event occurs.

Report	Selections	Description
R# Service Start	Yes, No	Reports service walk test start event.
R# Service End	Yes, No	Reports service walk test end event.
R# Fire Walk St	Yes, No	Reports fire walk start event.
R# Fire Walk End	Yes, No	Reports fire walk end event.
R# Walk Test St	Yes, No	Reports walk test start event for walk test and invisible walk test.
R# Walk Test End	Yes, No	Reports walk test end event for walk test and invisible walk test.
R# Extra Point	Yes, No	Reports extra point event.
R# Send Point Text*	Yes, No	Reports point text.
R# RF Low Bat	Yes, No	Reports point low battery conditions for RF Points.
R# RF Low Bat Res	Yes, No	Reports point low battery restoral conditions for RF Points.

^{*}Point Text will always be transmitted when using NetCom applications.

Table 13: Point Reports

User Chng Reports

Selecting Yes enables a report to be sent when the event occurs.

Report	Selections	Description
R# Date Changed	Yes, No	Reports date change event.
R# Time Changed	Yes, No	Reports time change event.
R# Delete User*	Yes, No	Reports delete user code event.
R# User Code Chg	Yes, No	Reports user passcode add or change event.
R# Area Watch	Yes, No	Reports area watch start and watch end.
R# Card Assigned**	Yes, No	Reports card assigned to user event.
R# Change Level**	Yes, No	Reports access control level change event.

^{*}With **R# Delete User** events, the panel will always use the account number from Area 1.

Table 14: User Change Reports

Access Reports

Selecting Yes enables a report to be sent when the event occurs.

Note: Access Reporting is not available with the D7212G.

Report	Selections	Description
R# Access Granted*	Yes, No	Reports "access granted" event.
R# No Entry*	Yes, No	Reports "no entry" event.
R# Door Lt Open*	Yes, No	Reports "door left open" event.
R# Cycle Door*	Yes, No	Reports "open door" event.
R# Door Unlocked*	Yes, No	Reports "unlock door" event.
R# Door Secure*	Yes, No	Reports "secure door" event.
R# Door Request*	Yes, No	Reports "request to enter" or "request to
R# Door Locked*	Yes, No	Reports "locked door" event.

^{*}Event not transmitted with D7212G. Leave set to default.

Table 15: Access Reports

^{**}Event not transmitted with D7212G. Leave set to default.

2.4 Enhanced Routing

Enhanced routing allows the panels to determine whether events will be routed over standard telephone lines and/or a Local/Wide Area Network. In order to send events over a LAN/WAN, a D9133TTL-E (SDI-Network Interface Module) is required. In addition to this, enhanced routing enables/disables the panel's ability to send events to a Numeric Pager. If the installation does not require these applications, you may skip this section.

Enhanced routing, whether you use standard telephone lines or the D9133TTL-E, let you select full or partial groups of events to be reported to up to four different destinations. Routing includes choosing which is the most important destination, whether events are reported to a single or duplicate(s) destinations and if the events fail, which backup destination is to be used.

2.4.1 Programming a Primary and Backup Destination

Each *Route* # has an *R# Primary Device* and an *R# Backup Device*. With the addition of Enhanced Communications, the *R# Primary Device* destination can be either the *Phone* # or the *Path* # *IP Address* to which the Route Group will first attempt to send the event. If the *R# Primary Device* destination fails to connect to the central station receiver after one or two attempts (see also *RG# 1 Attempt*), then the *R# Backup Device* destination will be attempted.

2.4.2 Programming a Duplicate Report

To allow an event within a group to report to multiple groups, the event should be **Yes** for each *Route* # available. For instance, programming Fire Alarms for Route Group 1 and Route Group 2 will result in the fire alarms *first* reporting to Route Group 1 followed by a duplicate report to Route Group 2.

The *Enhanced Routing* section determines which Route Groups and which destinations within the Route Groups will use D9133TTL-E modules for reporting purposes. A single D9133TTL-E module can be used to transmit events to up to four different destinations.

For example, if you wanted to send events using Route Group 1 over a Local or Wide Area Network as your Primary destination and use a standard telephone line as your Backup destination, you would need to program the following sections:

Step 1. Routing (Section 2.3 Routing [on page 16] in the 9000MAIN handler)

- a. Select Route Group 1
- b. Program a 1 for Primary Destination
- Program a 1 for Backup Destination
- d. Enable all applicable events to be included in Route Group 1

Step 2. Phone (Section 2.1 Phone [on page 11] in the 9000MAIN handler)

- a. Select Phone 1
- b. Program Phone 1 with the applicable central station receiver phone number

Step 3. Enhanced Routing (Section 2.4 Enhanced Routing [on page 24] in the 9000MAIN handler)

- c. Program a Yes for Route Group 1 Primary SDI (this tells the panel to send the events to the D9133TTL-E using IP Address 1)
- d. Program a No for Route Group 1 Backup SDI (as this tells the panel to use the phone line to send events if the Primary destination fails after one or two attempts)

Since you are using an SDI Path to send events in the example above, you will also need to program the applicable items in *Section 6.4 Enhanced Communications* found in the *RADXAUX1* handler (beginning on page 135).



If a D9133TTL-E is to be used as a Primary Device in <u>any</u> of the Route Groups, then the following programming rule must be adhered to:

Assign IP Address 1 as the Primary Device in Route Group 1.

Assign IP Address 2 as the Primary Device in Route Group 2.

Assign IP Address 3 as the Primary Device in Route Group 3.

Assign IP Address 4 as the Primary Device in Route Group 4.

The Backup Device in any Route Group can use any Phone # or IP Address #.



If the External Modem feature is used, RG# Primary SDI and RG# Backup SDI must be set to No. The control panel supports either Enhanced Communication or External Modem, but not both at the same time.

RG# Primry SDI

Default: No Selections: Yes / No

This item determines if the Primary destination for Route Group 1 (2, 3, or 4) will be sent to the D913TTL-E.

RG# Backup SDI

Default: No Selections: Yes / No

This item determines if the Backup destination for Route Group 1 (2, 3, or 4) will be sent to the D913TTL-E.



In order to completely disable Enhanced Routing over a SDI path, RG#Primary SDI, RG#Backup SDI, and Enhanced Comm prompts must all be set to No.



The Poll Rate entry for the Backup SDI path may need to be increased due to the amount of traffic on the network and/or excessive signals being generated at once.

RG# Primary Pager

Default: No Selections: Yes / No

This item determines if this Route Group will send events to a Numeric Pager. To send events to a numeric pager, a *Phone #* must also be programmed in the Route Group's Primary destination.



If programming the panel to dial a numeric pager, carefully consider which Route Group it will use. If there are any events that are going to be transmitted to a central station, be sure to place those events in a lower numbered Route Group class than the events that are in the Route Group for the Numeric Pager.

2.4.2.1 Numeric Pager Capability

The D7212G Control/Communicator has the ability to transmit nearly any event to a numeric pager. Any time an event is generated and routed to a numeric pager, the panel will attempt to call the numeric pager <u>once</u> for each message in the queue. To enable the pager functionality, program both the Primary and Backup Phone number to the numeric pager's phone number in any of the four Route Groups. Then select which events are to be routed to the numeric pager within the Route Group that was selected.

When events are sent to a numeric pager, up to four fields can be displayed in the pager message. The four fields are:

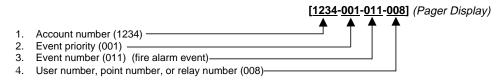


Figure 1: Pager Display Fields



The account number must contain four numeric digits. No alpha characters (B-F) are allowed when using Numeric Pager capability.

Programming the Pager Phone Number

To program the pager phone number, enter the number used to reach the pager, followed by pauses. Entering "C" creates a 3 second pause. (Example: 5552341CCC.)

You will have to experiment with the number of pauses you add after the page phone number. Each pause is equal to about 3 seconds. Try calling the pager yourself first and listening to the length of time it takes to get a beep allowing you to enter touch-tone information. This length is what you must program after the pager's phone number in *Section 2.1 Phone* of the *9000MAIN* handler on page 11. If you need a longer pause, enter "D" after the number. Each "D" is equal to 7 seconds.

Using "#" characters in the phone number can affect how the event is displayed on the pager:

- No "#" characters in phone number: dashes will appear in the display [1234-001-011-008]
- One "#" character in phone number: dashes are replaced by zeros: [1234000100110008]
- Two or more "#" characters in phone number: dashes will appear in the display: [1234-001-011-008]

For example, if the phone number "2773074#CC" (seven-digit pager phone number followed by "#" and two pauses), the pager message would be displayed as follows: [1234000100110008] (dashes are replaced by zeros).

If the "#" is not placed in the phone number, the message looks like this: [1234-001-011-008]

Also, a user may not want all four fields to be displayed in the pager message. "*" characters in the phone number allow the user to select the number of fields to be displayed in the pager message. To limit the number of fields shown in the pager message, enter the appropriate number of "*" characters in the phone number as shown below.

- Zero "*" characters in phone number: All four fields are displayed.
- One "*" character in phone number: First field only is displayed.
- Two "*" characters in phone number: First two fields are displayed.
- Three "*" characters in phone number: First three fields are displayed.
- Four or more "*" characters in phone number: All four fields are displayed.

For example, the phone number "2773074***CC" (seven digit pager phone number followed by three asterisks and two pauses) produces the pager display of: [1234-001-011] (three fields are displayed at the pager).

The following table shows the description of each event, the corresponding priority, and the corresponding event number.

Event Description	Event Priority	Event Number	Event Description	Event Priority	Event Number
Fire Alarm	001	011	S: Door Left Open*	n/a	n/a
Fire Restoral (after Alarm, Supervision)	005	014	SDI Device Failure**	004	070
Fire Missing	005	013	SDI Device Restoral**	008	071
Fire Trouble	005	012	Watchdog Reset	004	077
Fire Supervision	005	124	Parameter Checksum Fail	n/a	n/a
Fire Restoral (after Tbl, Msg, Bypass)	005	015	Reboot	008	082
Fire Cancel	004	027	Phone Line Fail	004	068
Fire Supervision Missing	005	146	Phone Line Restoral	008	069
Fire Supervision Restore	005	123	AC Failure	004	072
Alarm Report	003	016	AC Restoral	008	073
Burg Restore	006	018	Battery Missing	004	074
Duress	002	004	Battery Low	004	075
Missing Alarm	006	019	Battery Restoral	008	076
User Code Tamper	008	055	Route Comm Fail	004	066
Trouble Report	006	017	Route Comm Restore	008	067
Missing Trouble	008	020	Checksum Fail	n/a	n/a
Non-Fire Supervision	006	078	Sensor Reset	007	031
Point Bus Fail	006	024	Relay Set	007	032
Point Bus Restoral	006	091	Relay Reset	007	033
Non-Fire Cancel	004	045	Sked Executed	007	057
Alarm Restore	006	026	Sked Changed	007	058
Supervision Missing	008	147	Fail to Execute	008	151
Unverified Event	006	169	Event Log Threshold	008	052
Point Bypass/ Command Bypass	007	007	Event Log Overflow	008	053
Forced Point	007	008	Parameters Changed	008	054
Point Opening	008	021	RAM Access OK	008	064
Point Closing	008	022	RAM Access Fail	008	065
Was Force Armed	007	034	Remote Reset	008	079
Fail To Open	008	040	Program Access OK	n/a	n/a
Fail To Close	008	041	Program Access Fail	n/a	n/a
Extend Close Time	008	044	Service Start	008	029
Opening Report	008	047	Service End	008	030
Forced Close	007	048	Fire Walk Start	008	036
Closing Report	008	050	Fire Walk End	008	037
Forced Close Perim Instant	007	084	Walk Test Start	008	038
Forced Close Perim Delay	007	085	Walk Test End	008	039
Perimeter Instant Armed	008	088	Extra Point	008	023
Perimeter Delay Armed	008	089	Send Point Text	n/a	n/a
Send User Text	n/a	n/a	RF Low Battery	006	093
S: Alarm	n/a	n/a	RF Battery Restore	006	094
S: Trouble	n/a	n/a	Date Changed	008	059
S: Supervision	n/a	n/a	Time Changed	008	060
Status Report	008	035	Delete User	008	090
S: Open	n/a	n/a	User Code Change	008	056
S: Close	n/a	n/a	Area Watch	008	042
Test Report	008	051	Card Assigned*	008	110
S: Perimeter Instant	n/a	n/a	Change Level*	007	061
S: Perimeter Delay	n/a	n/a	Access Granted*	008	001
S: Fire Supervision	n/a	n/a	No Entry*	008	115
S: Fire Alarm	n/a	n/a	Door Left Open*	008	116
S: Fire Trouble	n/a	n/a	Cycle Door*	008	110
S: Missing Fire (Trouble)	n/a n/a	n/a	Door Unlocked*	008	113
S: Missing Fire (Trouble) S: Missing Burglary ((Trouble)			Door Secure*	008	
	n/a	n/a			114
S: Missing Burglary (Alarm)	n/a	n/a	Door Request*	008	117
S: Fire Supervision Missing	n/a	n/a	Door Locked*	008	145 005
S: Burglary Supervision Missing	n/a	n/a	User Alarm Command 7	002	000

^{*}Event not transmitted with D7212G.

**SDI Device # is not reported when using pager format.

Table 16: Event Descriptions, Priorities, and Numbers

Power Supervision

2.5 Power Supervision

AC Fail Time

Default: 15

Selections: 1 - 90 {(Blank) and 0 are invalid}

Program the amount of time that AC power must be off before the panel responds to the AC failure. Please refer to the following information to determine the available options. The response to restoral of AC power is delayed for the same amount of time. The panel always monitors AC.

When you program AC Fail Time, if the second digit is a...

- 1, 3, 5, 7 or 9 (i.e., 3, 5, 11, 13, 15, 21, etc.)
 - The AC Fail Time interval will be in *minutes*.
- 2, 4, 6, 8 or 0 (i.e., 2, 4, 6, 10, 12, 20, 22, etc.)
 - The AC Fail Time interval will be in seconds.

For the following items to be true, AC Fail/Res Rpt must be programmed as Yes and AC Tag Along must be programmed as No.

When you program AC Fail Time, if the second digit is a...

- 1, 3, or 5 (i.e., 3, 5, 11, 13, 15, 21, etc.)
 - The AC Fail Time interval will be in <u>minutes</u> and an AC Fail event will be transmitted after the loss of AC for this amount of time.
 - No additional AC Fail events will be transmitted after six or twelve hours.
- **2, 4, or 6** (i.e., 2, 4, 6, 12, 14, 16, 22, 24, 26, etc.)
 - The AC Fail Time interval will be in <u>seconds</u> and an AC Fail event will be transmitted after the loss of AC for this amount of time.
 - No additional AC Fail events will be transmitted after six or twelve hours.

7 (i.e., 7, 17, 27, 37, etc.)

- The AC Fail Time interval will be in <u>minutes</u> and an AC Fail event will be transmitted after the loss of AC for this amount of time.
- An additional AC Fail event will be transmitted after 6 hours if the AC Fail condition is still present.

8 (i.e., 8, 18, 28, 38, etc.)

- The AC Fail Time interval will be in <u>seconds</u> and an AC Fail event will be transmitted after the loss of AC for this amount of time.
- An additional AC Fail event will be transmitted after 6 hours if the AC Fail condition is still present.

9 (i.e., 9, 19, 29, 39, etc.)

- The AC Fail Time interval will be in <u>minutes</u> and an AC Fail event will be transmitted after the loss of AC for this amount of time.
- An <u>additional</u> AC Fail event will be transmitted after <u>12 hours</u> if the AC Fail condition is still present.

0 (i.e., 10, 20, 30, etc.)

- The AC Fail Time interval will be in <u>seconds</u> and an AC Fail event will be transmitted after the loss of AC for this amount of time.
- An additional AC Fail event will be transmitted after 12 hours if the AC Fail condition is still present.

Power Supervision

For the following items to be true, AC Fail/Res Rpt must be programmed as No and AC Tag Along must also be programmed as No.

When you program AC Fail Time, if the second digit is a...

- 1, 3, or 5 (i.e., 3, 5, 11, 13, 15, 21, etc.)
 - The AC Fail Time interval will be in *minutes*. No AC Fail or AC Restoral events will be transmitted.
- **2, 4, or 6** (i.e., 2, 4, 6, 12, 14, 16, 22, 24, 26, etc.)
 - The AC Fail Time interval will be in seconds. No AC Fail or AC Restoral events will be transmitted.

7 (i.e., 7, 17, 27, 37, etc.)

- The AC Fail Time interval will be in <u>minutes</u>. An AC Fail event will only be transmitted after <u>6 hours</u> if the AC Fail condition is still present.
- 8 (i.e., 8, 18, 28, 38, etc.)
 - The AC Fail Time interval will be in *seconds*. An AC Fail event *will only be* transmitted after <u>6 hours</u> if the AC Fail condition is still present.
- 9 (i.e., 9, 19, 29, 39, etc.)
 - The AC Fail Time interval will be in <u>minutes</u>. An AC Fail event will only be transmitted after <u>12 hours</u> if the AC Fail condition is still present.
- **0** (i.e., 10, 20, 30, etc.)
 - The AC Fail Time interval will be in **seconds**. An AC Fail event will only be transmitted after 12 hours if the AC Fail condition is still present.



Application Note To totally eliminate AC Reporting, AC Tag Along and AC Fail/Res Rpt must be programmed No and the second digit of the AC Fail Time must be a 1, 2, 3, 4, 5, or 6.

AC Fail/Res Rpt

Default: No Selections: Yes / No

AC Power Supervision reports are sent to the central station and local printer at the time programmed for AC Fail Time.

Yes	Send AC Fail and AC Restoral reports.
No	Does not send AC Fail and AC Restoral reports.



To comply with NFPA standards and UL 985 requirements, program this item as No and program AC Tag Along as Yes. When programmed in this fashion, AC Restoral reports will not be transmitted.

Power Supervision

AC Tag Along

Default: Yes Selections: Yes / No

Send AC reports only if any other event occurs while AC is off-normal.

Yes	Send AC messages as tag along events.
No	Do not send AC messages as tag along events.



If AC Tag Along is set to Yes and a subsequent event is generated, the AC Fail event will be transmitted <u>first</u>, prior to any subsequent events being transmitted.

AC Tag along is required for NFPA and UL 985. Be sure to program AC Fail/Res Rpt as No if AC Tag Along is programmed Yes.

AC/Battery Buzz

Default: No Selections: Yes / No

Initiate a panel wide trouble tone at command centers when AC fails or battery is low or missing. This program item does not prevent the SERVC AC FAIL or SERVC BATT LOW displays.

Yes	Initiate panel wide trouble tone at all command centers.
No	Does not Initiate panel wide trouble tone at command centers



To comply with NFPA standards and UL 985 requirements, program this item as Yes.



How to de-select individual command centers for panel wide trouble tones. Panel wide trouble tones for programming the CC Trouble Tone in the command center parameters to No can turn off individual command centers (based on their CC# (1-8)).

Bat Fail/Res Rpt

Default: Yes Selections: Yes or No

This prompt determines if a report will be sent if the battery is low or missing.

The battery must be discharged below 12.1 VDC for 16 seconds before the panel responds to a low battery (see the *D7212G Operation and Installation Guide* (P/N: 4998138544) for discharge schedule). It will take between 10 and 60 seconds for a missing battery to be detected.

Yes		Battery failure and restoral reports are sent to the central station. They are routed to the telephone number programmed for <i>Power/Phone</i> events.		
	Modem Reports	missing or shorted	BATTERYMISSING	
	_	discharged below 12.1 VDC	BATTERY LOW	
	BFSK Reports	missing, shorted low battery	TROUBLE ZONE 9	
No	Battery failure and re	storal reports are NOT sent to the cent	ral station.	

Table 17: Battery Reports



To comply with NFPA standards and UL 985 requirements, program this item as Yes.

Printer Parameters

2.6 **Printer Parameters**

One D9131A Parallel Printer Interface Module can be connected to the D7212G's SDI bus. The printer is identified by an address of "17." Options are available for routing reports and area assignments.

Printer Address

17 **Default: Selections:** 17

Enter the printer address you are programming.

P## Area Assign

Default: Selections: 1 - 4

Assign an area to the printer programmed in printer address.



The D7212G allows up to only four areas. Although the D5200 allows entries for Areas 5 through 8, they are not applicable for use on the D7212G.

If Areas 5 through 8 are inadvertently programmed on the D7212G, the command center will display CALL FOR SERVICE.

P## Supervised

No **Default: Selections:** Yes or No

Supervise this SDI address and generate TROUBLE SDI ## reports and local trouble annunciation if a problem occurs with this printer or the SDI bus.

Yes	Only one printer can be installed for this P## SDI address.
No	More than one unsupervised printer can be installed using this P## SDI address using the same address dipswitch setting.



Unsupervised printers sharing the same address setting will print the same text.

TROUBLE SDI ## reports are always reported as Area 1, Account 1 events regardless to which area the SDI Note: device is assigned.

When P## Supervised is set to Yes and all Printer Event Groups (i.e., P## Fire Events, P## Note: Burglar Event... P## Usr Chng Evt) are set to No, the panel does not generate Trouble SDI ##

reports for the printer if the D9131A becomes disconnected.

P## Scope

Default: No Printer

Selections: No Printer, Area, Account, Panel Wide, Custom

Press [SPACE] bar to scroll through the selections. Press [ENTER] when the correct selection appears in the display.

Panel wide	Printer prints all designated events that occur panel wide. A Panel wide printer can cross account boundaries.
Account	Printer prints all designated events that occur within any area that has the same account number in which this printer is assigned.
Area	Printer prints all designated events that occur in the area to which this printer is assigned.
Custom	See the <i>Programming Tip</i> below. Printer prints all events occurring in areas programmed Yes for this prompt regardless of any boundary restrictions.
No Printer	No printer installed at this address. If a printer is connected data will not print out.

Table 18: Printer Scope

9000MAIN

Printer Parameters



The following prompts are visible ONLY when you program P## Scope to Custom.



The D7212G allows up to only four areas. Although the D5200 allows entries for Areas 5 through 8, they are not applicable for use on the D7212G.

If Areas 5 through 8 are inadvertently programmed on the D7212G, the command center will display CALL FOR SERVICE.

P## A1[through A4] In Scope

Default:

No

Selections:

Yes or No

Only available if *P## Scope* is programmed *Custom*. This program item determines whether events occurring in this area will be printed at this printer.

Yes	Include Area # events in the scope of this printer.
No	Does not include Area # events in the scope of this printer.

Note:

Refer to the routing report groups to identify the events that will print. Events programmed as No in Routing will still print at the local printer. Individual events within the report group cannot be suppressed for events printed at the local printer.

P## Fire Events

Default: See Program Record Sheet

Selections: Yes or No

Use this prompt to determine whether these events will print at this printer.

Yes	All events in this group will print at this printer.
No	No events in this group will print at this printer.

P## Burglar Event

Default:

See Program Record Sheet

Selections: Yes or No

P## Access Event

Default:

See Program Record Sheet

Selections: Yes or No

P## User Event

Default:

See Program Record Sheet

Selections: Yes or No

P## Test Event

Default:

See Program Record Sheet

Selections:

Yes or No

P## Diag Event

Default:

See Program Record Sheet

Selections:

Yes or No

Printer Parameters

P## Auto Functions Event

Default: See Program Record Sheet

Selections: Yes or No

P## RAM Event

Default: See Program Record Sheet

Selections: Yes or No

P## Relay Event

Default: See Program Record Sheet

Selections: Yes or No

P## Point Event

Default: See Program Record Sheet

Selections: Yes or No

P## Usr Chng Evt

Default: See Program Record Sheet

Selections: Yes or No

RAM Parameters

2.7 RAM Parameters

These program items are used to enable Remote Account Manager (RAM) functions in the panel using the on-board phone connection. Two other methods of remote programming are available (External Modem or Local/Wide Area Network connection) using RAM. Please refer to *Section 6.3 SDI RAM Parameters* in the *RADXAUX1* handler of this guide (beginning on page 128) for further information on these types of remote programming.

2.7.1 Uploading and Downloading Reports

When the panel is programmed to send reports in Modem format, when RAM makes contact with the panel and the passcode is incorrect, the panel sends a RAM ACCESS FAIL report to the D6500/D6600. RAM ACCESS FAIL is also generated when the call is not terminated with either a GOOD-BYE or RESET-BYE command.

RAM ACCESS OK is sent according to phone routing when a GOOD-BYE command is entered from RAM to terminate the call.

When a RESET-BYE is used to terminate the call, a REMOTE RESET report is sent to the D6500/D6600, and a RAM ACCESS OK is placed into the panel's event log. Reports in the event log that have not been sent prior to the RESET-BYE are never sent to the D6500/D6600.

When RAM programming changes parameters, a PARAMETERS CHANGED report is sent to the D6500/D6600. Bosch Security Systems recommends that if any programming changes are made that a RESET-BYE be performed.

When RAM attempts to make contact with the panel, the RAM Passocde and Data Lock code are verified. If the panel passcode matches and the Data Lock code does not, the panel will still generate a RAM ACCESS OK event. However, the session will end immediately.

To disable remote programming, enter (Blank) in both Answer Armed and Answer Disarmed on page 36 in this section.

2.7.2 Log Threshold Reports

If communication with RAM is not successful, or if there is no phone number programmed in *RAM Ph*, the panel generates a LOG THRESHOLD and a BAD CALL TO RAM. This indicates that the log is filling and the panel can't download its events.

If there is no RAM Ph programmed, the panel generates the LOG THRESHOLD and BAD CALL TO RAM events immediately. BAD CALL TO RAM events are currently logged locally only. If there is a RAM Ph programmed, the panel makes multiple attempts to reach RAM before sending the reports. See

RAM Ph on page 36 for an explanation of dialing characteristics.

2.7.3 RAM Callback Reports

When dialing the RAM phone number, the panel immediately makes two attempts to reach the RAM. If the panel does not reach RAM on the first two attempts, it waits 10 minutes then tries six more times with a 10 minute interval between each attempt. One hour after the last failed attempt, the panel again starts dialing the RAM phone number. It immediately makes two more attempts then waits 10 minutes and tries six more times with 10 minute intervals between each attempt before generating a BAD CALL TO RAM report and abandoning the effort.

Remote Program Dialing Exception: When a RAM phone number is programmed, the user can call RAM by pressing [COMMAND][43] then the [NEXT] key until CALLRAM? is displayed, then pressing [ENT]. When performing this function only one attempt is made to contact RAM.

RAM Passcode

Default: 999999

Selections: 0 - 9, A - F (6 characters required)

Enter six characters. Do not use [SPACE] in the passcode.

The panel verifies that the Remote Account Manager at the central station has valid access before connecting using the RAM passcode.

RAM Parameters

Log % Full

Default: (Blank)

Selections: 1 – 99, or (Blank)

This parameter determines how full the memory log should be before initiating a call to RAM at the central station. This allows the central station to call the panel and copy the memory log before messages could be overwritten.

(Blank) disables the LOG THRESHOLD and LOG OVERFLOW events. These events are not put in the log nor reported to the D6500/D6600 or to the local printer.

The panel continues to log events after the LOG THRESHOLD report is sent. When it reaches 100% capacity (memory logger is full and previously stored events will be overwritten), the panel generates a local LOG OVERFLOW event.

The panel won't call RAM again until it downloads the log and the *Log* % *Full* percentage is again reached. These events are also sent to the panel's event log and to the local printer(s) if installed.



The log overflow event is not sent to the central station unless Expanded Test Rpt is programmed Yes.

RAM Call Back

Default: No Selections: Yes or No

Using this function allows the panel, after it has verified RAM passcode, to provide an additional level of security by hanging up and dialing the RAM phone number to call RAM at the central station prior to allowing any upload or download.

Yes	When the panel hears the proper RAM passcode, it hangs up the phone, seizes the phone line, then dials the programmed RAM phone number (see RAM Ph on page 36). This ensures that the panel only communicates with RAM units
	connected to the programmed phone number.
No	The RAM session is initiated immediately; no call back is required. The panel can engage in RAM sessions when called from any phone number and a proper RAM passcode is identified.



When using the RAM Call Back feature, be sure to program the character "C" as the last digit in the Ram phone number when using DTMF Dialing.

RAM Line Monitor

Default: Yes Selections: Yes or No

This program item enables a panel, which shares a phone line with an answering machine to communicate with RAM at the central station even though the answering machine has answered the phone. You must program *Answer Armed* and/or *Answer Disarmed* and the panel must be in the proper armed state.

Yes	Allow the panel to communicate with RAM after the answering machine has answered the phone.
No	This item should be programmed No if the panel is not sharing the phone line with an answering machine.



This item should be programmed No if it causes false seizures of the phone line or if you are not using RAM. (This would indicate that a device using the same frequency tone is also using the phone line to which the panel is connected.)

RAM Parameters

Note: If RAM Call Back is programmed Yes, the panel will hang up the phone after the RAM tone and a proper RAM

passcode is identified, then it will call the RAM phone number.

Answer Armed

Default: See Program Record Sheet

Selections: 1 - 15, or (Blank)

Set telephone ring counter to answer when all areas are master armed. If any area in the panel is perimeter armed or disarmed, the *Answer Disarmed* ring counter is used.

(Blank)	No answer.
1 – 15	The panel answers the phone after the specified number of rings when all areas are master armed.

Note: The Remote Account Manager considers Perimeter Armed as a disarmed state.

Answer Disarmed

Default: See Program Record Sheet

Selections: 1 - 15, or (Blank)

Set telephone ring counter to answer when any area is in a perimeter armed or disarmed state.

(Blank)	No answer.
1 – 15	The panel answers the phone after the specified number of rings when any area in the system is in a perimeter armed or disarmed state.

The Remote Account Manager considers Perimeter Armed as a disarmed state.

RAM Ph

Note:

Default: (Blank)

Selections: Up to 24 characters

This is the phone number the panel dials to contact RAM. The panel dials the programmed number on Phone #5 (RAM Ph #) as a result of the following events:

Log % Full threshold is achieved



If Log % Full has been programmed with a value (1-99) and a RAM Phone # is programmed, the panel will dial the RAM Phone # when the Log Threshold is reached. This requires functionality that RAM IV has not yet implemented. Therefore, do not program Log % Full and RAM Phone # at the same time.

- The panel is contacted by RAM and RAM Call Back is programmed Yes
- CMD 43 is initiated and the user selects CALL RAM option

Enter up to 24 characters to define dialing characteristics.

٠.	8	
	(Blank)	Panel does not dial a phone number for RAM.

Note: See Phone 1 in Section 2.1 Phone, page 11 for programming this item.



Remote Program Dialing Exception: When a RAM phone number is programmed, the user can call RAM by pressing [COMMAND][4][3] then [NEXT] until CONTACT RAM? is displayed, then press [ENT]. At this point, the user can press [ENT] when RAM VIA PHONE? is displayed. When performing this function only one attempt is made to contact RAM.

Miscellaneous

2.8 Miscellaneous

Duress Type

Default: 1 Selections: 1 or 2

This program item determines whether users add one (+1) or two (+2) to the last digit of the passcode. To activate a duress alarm, the user increases the value of the last digit of their passcode when entering it at the command center.

Note: Duress is enabled/disabled by area in Area Parameters.



The duress alarm is activated when a user enters the duress combination followed by the termination keys ([ESC] or [ENT]).

1	Add "1" to the last digit to generate an alarm. For example, if the passcode is 6123, 6124 triggers a duress alarm.
	If the last digit of the passcode is 0, a duress alarm is generated when the user enters 1 as the last digit of the passcode.
	If the last digit of the passcode is 9, a duress alarm is generated when the user enters 0 as the last digit of the passcode.
2	Add "2" to the last digit to generate an alarm. For example, if the passcode is 6123, 6125 triggers a duress alarm)
	If the last digit of the passcode is 8, a duress alarm is generated when the user enters 0 as the last digit of the passcode.
	If the last digit of the passcode is 9, a duress alarm is generated when the user enters 1 as the last digit of the passcode.

Cancel Report

Default: No Selections: Yes or No

Use this program item to control whether or not CANCEL and FIRE CANCEL reports are sent.

A CANCEL and FIRE CANCEL report is created when a passcode is entered to silence an Alarm Bell or a Fire Bell before the bell time expires.

Yes	Send CANCEL and FIRE CANCEL reports according to Routing.
No	Do not send CANCEL and FIRE CANCEL reports.

2.9 Area Parameters

This programming module contains three programming categories: *Area Parameters, Bell parameters,* and *Open/Close Options.*

2.9.1 Area Parameters

Area

Default: 1 Selections: 1 - 4

Enter the Area Number you are programming.

A# Area On

Default: Yes (Area 1 only)
Selections: Yes or No

Use this program item to enable or disable the area specified.

Yes	Area is enabled.
No	Area is disabled.



The D7212G allows up to only four areas. Although the D5200 allows entries for Areas 5 through 8, they are not applicable for use on the D7212G.

If Areas 5 through 8 are inadvertently programmed on the D7212G, the command center will display CALL FOR SERVICE.



When programmed No:

Points assigned to this area do not generate events.

Command centers with Area scope which are assigned to this area display [AREA # DISABLED].

When arming and disarming, this area number is not displayed at control centers with the scope to view this area.

Status for this area is not reported with status reports.

All user authority in this area is turned off while the area is disabled.

Area 1 must be enabled: System events such as power and phone supervision will not report properly if Area 1 is disabled.

A# Acct Number

Default: 0000

Selections: For BFSK: 0000 – 0999, 0BBB – 0FFF

For Modem (4-digit account numbers): 0000 - 9999, BBBB - FFFF

For Modem (10-digit account numbers): 0000000000 - 999999999, BBBBBBBBB -

FFFFFFFFF

This program item determines the account number reported for this area. An account number must be assigned to each active area.

Account numbers are used to group areas together. Each area can have a different account number, or several areas may share the same account number. The panel uses the account number as a reference for arming and command center text displays.

BFSK: Only the last three digits are transmitted. Insert a $\mathbf{0}$ as the first digit of the account number. Example: $0\ 2\ 3\ 4$. **Modem IIIa**²: Enter a four-digit or ten-digit number.

Programming Account Numbers in D7212G Control/Communicators

Programming 4-Digit Account Numbers

To properly program a four-Digit Account Number (such as "1234") using the D5200 Programmer, *you must enter leading 0's (zeroes) in Digits 1-6*, and then enter "1234" into Digits 7-10. When 0's are entered for the first six digits (Digits 1-6), the D7212G Panel will treat this as a four-Digit Account Number. See the following:

	D520	00 Pro	gramm	er	
A#	Acct#	Dgt	1&2	0	0
A#	Acct#	Dgt	3&4	0	0
A#	Acct#	Dgt	5&6	0	0
A#	Acct#	Dgt	7&8	1	2
A#	Acct#	Dgt	9&10	3	4

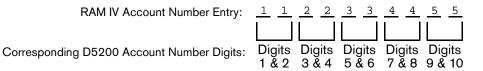
The D5200 account number entry shown above appears in RAM IV as 1234.

Programming 10-Digit Account Numbers

To properly program a ten-Digit Account Number (such as "1122334455") using the D5200 Programmer, you must enter a character for each of the ten digits. See the following:

	D520	00 Pro	gramm	er	
A#	Acct#	Dgt	1&2	1	1
A#	Acct#	Dgt	3&4	2	2
A#	Acct#	Dgt	5&6	3	3
A#	Acct#	Dgt	7&8	4	4
A#	Acct#	Dgt	9&10	5	5

The D5200 account number entry shown above appears in RAM IV as shown below:





Make sure your Central Station Receivers (D6500 MPU Version 1.06; D6600 CPU Version 01.01.04) and your automation software are compatible with ten-digit account numbers before programming a ten-digit account number in a D7212G Panel.

A# FA Bypass Max

Default: 1 Selections: 0 - 99

Specify the maximum number of combined controlled points that can be faulted or in a bypassed state when arming this area.

See *FA Returnable* and *BA Returnable* in the Point Index for returning a point to the system when the point returns to normal or when the area is disarmed.



Users are allowed to Bypass more points than the number entered here during the disarmed state. It is only when the user attempts to Bypass Arm an area (or areas) that this restriction will be enforced.



Points must have Bypassable programmed Yes to be bypassed or force armed. Force arming does not bypass 24-hour points.

A# Delay Res

Default: No Selections: Yes or No

Yes	Point restoral report will not be sent until the bell time expires or user acknowledges alarm condition.
No	Restoral reports are sent when point restores, regardless of bell time.

A# Exit Tone

Default: Yes Selections: Yes or No

Sound an exit tone during exit delay at all command centers assigned to this area.



How to de-select individual command centers for exit tones. Exit tones for programming the CC Exit Tone as No can be turned off individual command centers (based on their CC# 1 through 8).

A# Exit Dly Time

Default: 60

Selections: (Blank), (0) – 600 (in five-second increments)

Exit delay time for this area when Master Exit or Perimeter Exit arming.



Points programmed for "instant" alarms generate alarms immediately, even during exit delay. To prevent instant alarms on points the user must fault to leave the building, program P### Type in the Point Index as 3 (Interior Follower).

A# Auto Watch

Default: No Selections: Yes or No

Yes	When the area is disarmed, watch mode is turned on automatically.
No	When the area is disarmed, watch mode must be turned on or off manually.



Controlled points must be programmed as P## Watch Point to generate a watch tone.

A# Verify Time

Default: 60

Selections: 10-60 (in 1 second increments)

Alarm Verification is designed for use with smoke detectors to reduce the number of false fire alarms. When *Verify Time* is programmed, the panel can double check smoke detector point activations before generating alarm signals.



DO NOT enable the Cross Point feature in Point Indexes that are designated for fire points!

Check with your AHJ to determine the maximum verification time allowed.

Points are programmed individually to activate the verification feature. See *Point Index*. Any <u>resettable fire point</u> can activate alarm verification for the area to which it is assigned. Bosch Security Systems recommends the use of separate area alarm-verification relays.

To enable alarm verification on a point, program *Point Index Fire Point, Alarm Verify* and *Resettable* as Yes.

When an alarm verification point trips, the panel automatically removes power to all resettable points connected to the areas *Reset Sensors* relay. The sensor reset removes power to the sensors for the amount of time programmed in *Verify Time*. When power is reapplied, a 60-second confirmation window begins. If the detector is still in alarm, or trips again during the confirmation window, or if a different resettable verification point in the area trips, an alarm is generated.

Example:

Verify Time is set for 20 seconds. The alarm verification cycle starts when the detector trips. No report is generated. Immediately after the detector trips, the areas sensor reset relay interrupts power to points connected to it for the time in Verify Time.

When power is restored to the points, the 60-second confirmation window is established. If any detector that had been reset during the verification time is tripped again during the confirmation window, an alarm is generated. If no activity occurs during this period, no alarm is generated and the verification window ends. If a verification point trips again after the window ends, a new verification cycle begins.

	Verification Point Trip	Verify Time/Reset Sensors Power Removed Ignore Activity	60 second Confirmation Generate alarm if additional activity received.	Restart Alarm Verification Cycle if an Alarm Verification Point trips
Example: Total Cycle time 80 seconds	*	■20 Seconds ■		

Table 19: Verify Time Example

A# Duress Enable

Default: No Selections: Yes or No

This entry determines if this area allows duress alarms to be generated. See *Duress Type* in *Section 2.8 Miscellaneous* on page 37 for an explanation of Duress.

Yes	Enable Duress alarm for this area.
No	Disable Duress alarm for this area.

Note: When setting this item to No for a particular area and entering a valid Duress passcode for that area, the command center will now display NO AUTHORITY.

A# Area Type

Default: Regular

Selections: Regular, Master, Associate, or Shared

This program item is used to define boundaries between areas. Boundaries are defined in terms of whether an area can be armed while a user is in another area, whether an area will arm automatically when another area is armed, or whether an area will require other areas be armed before it is armed.

Press [SPACE] bar to scroll through the selections. Press [ENT] when the correct selection appears in the display.

Regular	Will arm or disarm as an independent area.		
Master	Will not allow arming for this area unless all Associate areas with the same A#Account Number are Master exit delay arming or Master armed. CHK AREA displays if the Associate areas have not yet been armed. EXCEPTION: RAM IV allows Master areas to be armed without all Associate areas being in the armed state.		
	A Master area can be disarmed regardless of the armed state of the other areas in the account.		
	Multiple Master areas can be programmed in a single account.		
	CC# Scope affects master Arming		
	Area: A Master Area that has a CC# Scope Area requires that the Associate areas are independently armed, or master exit delay before the Master area can arm.		
	Panel Wide/Account Wide: Upon arming the Master Area, all Associate areas within the CC# Scope of the Master area will begin to Master exit delay arm. The Shared area will begin its arming sequence once all Associate areas are armed.		
	Using the arming Sked (S## Function 1) requires that you first use an arming Sked to arm the Associate areas before using an arming Sked to arm the Master area. In addition, arming Master areas with RAM IV, Keyswitch, or Auto Close parameters (see Open/Close Options) is allowed to occur before all Associate areas are armed.		

Table 20: Area Types

Associate	Will allow arming and disarming regardless of the armed state of the other areas with the same A# Account Number. This type of area is used with a Master Area and is associated by having the same account number.
	Command Centers assigned to Associate areas, when used in conjunction with Shared areas, should have the CC# Scope programmed to encompass the Shared Area.
Shared	Shared areas can not be armed using a passcode, keyswitch, sub-control, Sked or by the remote account manager. Doing so will produce a Watchdog Reset.
	Note: The scope of all Associate areas must include the Shared area(s) in order to view faulted points.

Table 20 (cont'd): Area Types

2.9.1.1 Shared-Area Characteristics

Arming a Shared Area

Requires all Associate areas to be armed. As soon as the last Associate area is armed, the Shared area begins its arming sequence automatically. Passcode, keyswitch, sub-controls or Remote Account Manager can not arm shared areas. To allow faulted points to be displayed at associated areas, the shared and associate areas must share the same account number.

Disarming a Shared Area

Shared areas automatically disarm when any Associate area in the panel is disarmed. Passcode, tokens/cards, keyswitch, sub-controls or Remote Account Manager can not disarm shared areas.

Shared Area Arming Sequence

When Shared areas automatically begin to arm, the arming is based on the *A# Exit Dly Time* programmed for the *Area #* where the command center has been assigned.

Shared Area Not Ready

If a point is faulted in the Shared area, CHK AREA will display on the Associate command center that is arming the last Associate area. Associate area command centers can display faults from Shared areas as long as the Shared areas fall within the scope of the Associate area.

Force Arming a Shared Area

When CHK AREA is displayed, pressing [ESC] will display FORCE ARM at the Associate command center. Pressing [ENT] will force arm the Shared area if: the user has authority to bypass points, the point is bypassable, <u>AND</u> the number of faulted points does not exceed the force arm max amount for the Shared area. Remember to include the Shared area in the Associate area's scope.

Viewing Shared Area Armed Status

VIEW AREA STATUS can be used from a command center outside of the Shared area to view the Shared areas armed state.

Silencing Sounders in the Shared Area

Shared area alarms and troubles can be silenced from any command center.

To silence sounders, the user must have an authority level assigned to the Shared area. If the user also has the authority to arm/disarm the area, then ALREADY ARMED or ALREADY DISARMED will momentarily display.

Closing Reports for Shared Areas

If closing reports for Shared areas are required, Passcodes must also have a valid authority level assigned in the Shared area.

2.9.2 Bell Parameters

The D7212G has two main types of annunciation, Fire Bell and Burglary Bell. Both Fire and Burg Bells share the same terminal (Terminal 6) on the panel as shipped from the factory.

In the event of a simultaneous Fire Bell and Burg Bell occurrence, the Fire Bell takes precedence over the Burg Bell regardless of which relay or terminal output they share.

When the Fire and Burg Bells share the same output <u>and</u> a Fire Bell occurs while the Burg Bell is ringing, the Fire Bell pattern will override the Burg Bell pattern. At the end of the Fire time, the Burg pattern will resume.

When the Fire and Burg Bells share the same output <u>and</u> a Burg Bell occurs while a Fire Bell is sounding, the panel will wait until the Fire time has expired before starting the Burg Bell.

Either a single bell (panel wide) or a number of bells (Area) can be used on the panel. For programming these applications, see *Section 2.13.1 Area Relays* beginning on page 77.

When both Fire and Burg Bells have occurred simultaneously <u>and</u> a user enters a valid passcode, a FIRE CANCEL report for the fire alarm and a CANCEL report for the burg alarm will be reported to the central station if *Cancel Reports* is programmed Yes.

Area

Default: 1 Selections: 1 - 4

Enter the Area Number you are programming.



The D7212G allows up to only four areas. Although the D5200 allows entries for Areas 5 through 8, they are not applicable for use on the D7212G.

If Areas 5 through 8 are inadvertently programmed on the D7212G, the command center will display CALL FOR SERVICE.

A# Fire Time

Default: 6

Selections: 1 - 90 minutes

Enter the number of minutes the bell rings for fire alarm points. The relay activated for this time is programmed in *A# Fire Bell* in *Area Relays*.

The bell output begins as soon as the fire alarm occurs. It shuts off the bell when the programmed number of minutes has expired.

If programmed for 1 minute, the output may be anywhere from 0 to 60 seconds of bell time. It is recommended that you program *Fire Time* for 2 minutes or more to ensure you have ample output time.



Check with your AHJ to determine the appropriate bell time for your geographical area.

A# Fire Pat

Default: Pulse

Selections: Steady, Pulse, CaStnd, TmCod3

Select the bell pattern this area uses to signal an alarm on a fire point.

Press [SPACE] bar to scroll through the selections. Press [ENT] when the correct selection appears in the display.

Steady	Steady Output
Pulse	Pulse March Time
	120 beats per minute, at an even tempo
CaStnd	California Standard 10 seconds audible + 5 seconds silent + 10 seconds audible + 5 seconds silent. This sequence repeats until bell time expires.
TmCod3	Temporal Code 3 0.5 seconds On, 0.5 seconds On, 0.5 seconds Off, 0.5 seconds On, 1.5 seconds Off; pattern repeats. This sequence repeats for a minimum of 3 minutes and has a \pm 10% tolerance.

Table 21: Fire Bell Patterns

Note: When two fire points sharing the same relay go into alarm, the bell pattern of the most recent fire event takes precedence.

A# Burg Time

Default: 6

Selections: 1 - 90 minutes (in one minute increments)

Enter the number of minutes the bell rings for burglary alarm points. The relay activated for this time is programmed in $A\#Alarm\ Bell$ in $Area\ Relays$.

The bell output begins as soon as the burglary alarm occurs. It shuts off the bell when the programmed number of minutes has expired.

When the panel's internal clock begins a new minute, it considers the first minute expired. Bosch Security Systems recommends you program *Burg Time* for 2 minutes or more.



Check with your AHJ to determine the appropriate bell time for your geographical area.

A# Burg Pat

Default: Steady

Selections: Steady, Pulse, CaStnd, TmCod3

Select the bell pattern this area uses to signal an alarm on a non-fire point.

Press [SPACE] bar to scroll through the selections. Press [ENT] when the correct selection appears in the display.

A# Single Ring

Default: No

Selections: Yes or No

This program item determines if an alarm from a non-fire point can restart the alarm bell time with each alarm event, or only initiate alarm output once per arming period.

This does not silence the command center alarm bell tone, nor prevent any reports. This feature does not affect fire points. Fire points restart bell time with each new alarm.

Yes	One bell output per arming period. After one alarm, alarms on any non-fire points in the same area can not restart the bell until the armed state changes. An alarm on a different point in same area restarts bell output.
No	Restart bell output with each alarm event.

Note:

If a 24-hour point goes into an alarm while the area is disarmed, arming that area with a Key Switch will not clear the A# Single Ring flag.



Silencing bell resets Single Ring.

A# Bell Test

Default: No Selections: Yes or No

Provide alarm output from the relay programmed at *A# Alarm Bell* after the closing report has been confirmed or the exit delay time has expired.

Yes	Initiate bell test.
No	Do not initiate bell test.

2.9.2.1 Bell Test after Confirmation

In areas that report opening and closing activity, the Bell Test happens after the panel sends the closing report and receives the acknowledgment from the central station receiver. For proper operation of the Bell Test after closing confirmation, the following rules apply:

- The panel must report opening and closings to the central station
- Restricted openings and closings should not be used, and opening and closing windows should not be used.

2.9.2.2 Area Armed Confirmation

In areas that do NOT report opening and closing activity, the alarm bell relay output for this area is activated for 2 seconds after exit time expires.



Multiple Bell Tests will occur... When more than one area is armed at the same time (e.g., ARM ALL AREAS? function is used), the bell will ring for 2 seconds with a 2 second pause between each bell activation if all areas have the same exit delay time programmed. Otherwise, the bell test will occur as each area is armed and it completes its exit delay time.

When areas are armed simultaneously and report to the central station, the bell test will occur as the Central Station Receiver confirms each area.

2.9.3 Open/Close Options

Programming determines if Opening, all normal Closing and Force Arm/Bypass Closing events are reported to the remote central station. Without remote reporting, all panel and area arming (Closing events) and disarming (Opening events) default to local events.

Use this programming category to determine which opening and closing supervision characteristics are required.

There are three different ways to *generate* reports from the panel. You can generate reports by account, by area, or a combination of both.

There are two different ways to <u>suppress</u> reports. First, using Opening/Closing windows, you can suppress reports for a specified period of time and then automatically turn them on again. Secondly, you can suppress reports using the **Restricted O/C** options. In this case, a closing report is sent if the user is force arming, sending a duress or bypass arming.

An opening report is sent If the user is disarming during an alarm condition or unbypasses points when disarming. If the system is normal, then no opening or closing report is sent.

Note: For the scheduled suppression of Opening and Closing reports, see Section 5.1.1 Opening & Closing beginning on page 105, in the Windows programming module (RADXSKED Handler) to define opening and closing windows.

2.9.3.1 Account Opening and Closing Reports

Opening and Closing reports will be sent by Account when the last area in a group of areas with the same account number(s) is armed.

2.9.3.2 Area Opening and Closing Reports

Closing reports will be sent for each individual area as it is armed. The account number is also sent for each individual area.

2.9.3.3 Customizing Account Opening and Closing Reports

You can eliminate area opening and closing reports from selected areas in the account by programming A# Area O/C No for those areas.

2.9.3.4 Combination Account and Area Opening and Closing Reports

To send both <u>account</u> openings and closings, and individual <u>area</u> openings and closings for all areas in the account, you must (1) program *A# Acct O/C* Yes for all areas in the account and (2) program *A# Area O/C* Yes for all areas in the account.

Closing reports: In this configuration, when areas in the account are independently armed, each area generates an area closing report. In addition, when the last area is armed, it also generates an account closing report.

Opening reports: In this configuration, when the first area in the account is disarmed, it generates an account opening report along with an area opening report. When the remaining areas in the account are disarmed, each area will generate an area opening report.

2.9.3.5 Area Only Opening/Closing Supervision Features

This section of the program also provides other features you can use to supervise opening and closing activity <u>by area</u>. Auto Close, Fail To Open, and Fail To Close all work independently of the A# Acct O/C feature. To use these features however, you must program O/C Windows.

Area

Default: 1 Selections: 1 – 4

Enter the Area Number you are programming.



The D7212G allows up to only four areas. Although the D5200 allows entries for Areas 5 through 8, they are not applicable for use on the D7212G.

If Areas 5 through 8 are inadvertently programmed on the D7212G, the command center will display CALL FOR SERVICE.

A# Acct O/C

Default: No Selections: Yes or No

This program item determines if this area generates "account" opening and closing reports. Program this item the same for all areas in the account.

Yes	Send Opening and Closing reports by Account. Use this selection if the panel sends reports to an automation system that cannot interpret multiple area opening/closing reports, or if <i>Modem Format</i> is programmed No in the <i>Phone</i> category (BFSK format is in use and opening and closing reports are enabled). An "account" opening report is generated when the first area in an account is opened (disarmed). After the account opening report is sent, disarming other areas in the account does not generate another account opening report. An "account" closing report is generated only when the last area in an account is closed (armed). Opening and closing reports for accounts do not contain any area information. Opening and Closing Windows affect Account Opening and Closing Reports: If an account opening or closing is generated while an opening or closing window for this area is in effect, and <i>Disable O/C in Window</i> is programmed Yes, the report is not sent. Bosch Security Systems recommends that all areas sharing the same account number use the same Opening and Closing Window times.
No	Do not send Opening and Closing reports by Account.

A# Area O/C

Default: Yes Selections: Yes or No

This program item determines if the area number and the account number will be reported upon arming and disarming. As long as *Account O/C* is No, the account number will report when arming this area individually. If *Account O/C* is Yes, all areas with the same account number must also be armed.

An *area* opening report is generated when each individual area is opened (disarmed). An *area* closing report is generated when each individual area is closed (armed).

Yes	Include the Area # and generate Opening and Closing reports for this area when it is armed.
No	Do not include the Area # or generate Opening and Closing reports for this area.



Do not program this item as Yes if the panel reports to an automation system that cannot interpret multiple area opening/closing reports.

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Area Parameters

A# Disable O/C in Window

Default: Yes Selections: Yes or No

This item determines if opening and closing activity is reported when it occurs inside an Opening or Closing Window as programmed in *O/C Windows*.

Reports are always logged and printed on a local printer, if installed.

J 00					
Yes	Do not send OPENING and CLOSING reports to the central station if they occur inside an active window.				
	If an opening or closing report occurs outside of a window, send it with an early or late modifier. See <i>O/C Windows</i> .				
	The active window must be a closing window for closing reports. It must be an opening window for opening reports.				
No	Send OPENING and CLOSING reports to the central station even when they occur inside a programmed window. If an opening or closing occurs outside of the appropriate window, it reports but does NOT have an early or late modifier.				
	If you want to monitor all opening and closing activity, but you also want to use features provided by Opening and Closing Windows, program this item No , and program appropriate <i>O/C Windows</i> .				

A# Auto Close

Default: No Selections: Yes or No

With this program item, you can have the panel automatically Master arm the area at the end of the closing window regardless of the previous armed state.

Yes	The area automatically Master arms at the end of the close window.			
	When the area is armed automatically a closing report will be sent if Area and/or Account reports are programmed to do so.			
No	Do not automatically arm the area at the end of the close window.			



Regardless of A# Force Arm Max or P## Bypassable, an unconditional force arm will occur resulting in points that are faulted being left out of the system until they are returned to normal.

A# Fail To Open

Default: No Selections: Yes or No

This entry allows you to determine if a FAIL TO OPEN report is sent for this area. This can be used to determine if a user failed to DISARM the area prior to the *opening* window expiring. Normal opening and closing reports do not need to be programmed to use this feature.

Yes	FAIL TO OPEN report will occur for this area if the area has not been disarmed when the <i>opening</i> window stop time has occurred.		
No	FAIL TO OPEN report will not be sent for this area.		

A# Fail To Close

Default: No Selections: Yes or No

This entry allows you to determine if a FAIL TO CLOSE report is sent for this area. This can be used to determine if a user failed to ARM the area prior to the *closing* window expiring. Normal opening and closing reports do not need to be programmed to use this feature.

Yes	FAIL TO CLOSE report will occur for this area if the area has not been armed when the <i>closing</i> window stop time has occurred.				
	ote: An exit delay time must be programmed in <i>Exit Dly Time</i> .				
No	FAIL TO CLOSE report will not be sent for this area.				
	Note: If <i>Auto Close</i> is programmed Yes, a FAIL TO CLOSE report is sent because it will occur when the <i>closing</i> window stop time has occurred.				
	If <i>Disable O/C in Window</i> is Yes, the FAIL TO CLOSE report is followed by				
	CLOSING LATE or F(orce) CLOSE LATE.				

A# Restrictd O/C

Default: No Selections: Yes or No

This item determines if this area can Restrict Opening and Closing report activity.

A restricted opening report refers to the panel sending an area opening report *only when the area is disarmed after a non-fire alarm.*

A restricted closing report refers to the panel sending an area closing report *only when the area has been master armed with controlled points that were faulted during the arming sequence.* The sequence of reports generated by a restricted closing is: WAS FORCE ARMED, FORCED POINT, FORCED CLOSE, then CLOSING REPORT.

Yes	Restrict opening and closing reports for this area. A# Area O/C must be programmed Yes to generate restricted opening and closing reports.			
	Note: If a passcode is not required for arming or disarming and this item is Yes , the area only sends restricted opening and closing reports. In this case, restricted reports are sent without User ID.			
	Opening/Closing Window does not affect this report: Windows do not prevent restricted opening and closing reports from being sent. Early or late designations are NOT added to opening/closing reports when they are sent according to the rules for restricted opening/closing reports.			
No	Do not Restrict Opening and Closing reports for this area.			
	Regardless of programming in <i>Authority Levels L## Restricted O/C</i> , reports are not restricted in this area when this item is programmed No .			
	Note: WAS FORCE ARMED and FORCED CLOSE events can still be sent to the central station if enabled in Phone Routing when force arming the system.			

A# Perimeter O/C

Default: No Selections: Yes or No

This item determines if this area can send Perimeter Instant and Perimeter Delay Closing reports and normal Opening reports to the central station. *Opening/Closing windows do not suppress this event.*



Modem format reporting is required. Some Central Station automation systems can not process these reports.

Yes	This area can send perimeter opening and closing reports.		
No	This area can not send perimeter opening and closing reports.		

2.10 Command Center

This programming module contains three programming categories: *Cmd Cntr Assignment, Area Text*, and *Custom Function*.

2.10.1 Cmd Cntr (Command Center) Assignment

This programming category assigns a command center to an Area and determines if the command center will be supervised. The command centers are connected to the panel using a two-wire serial data interface bus, (SDI bus). This bus can support up to eight supervised command centers, each with their own unique command center address (CC) and corresponding dipswitch address settings. Should the command centers not be supervised, you can install multiple command centers with the same dipswitch address setting for up to 32 unsupervised command centers.

Cmd Center

Default: 1 Selections: 1 – 8

Enter the command center number (CC) for the SDI address you are programming. This number corresponds to the dipswitch address settings shown below.

SDI		Dipswitch Settings					
CC#	Address #	1	2	3	4	5	6
CC 1	Address 1	ON	ON	ON	ON		ON
CC 2	Address 2	OFF	ON	ON	ON		ON
CC 3	Address 3	ON	OFF	ON	ON		ON
CC 4	Address 4	OFF	OFF	ON	ON		ON
CC 5	Address 5	ON	ON	OFF	ON		ON
CC 6	Address 6	OFF	ON	OFF	ON		ON
CC 7	Address 7	ON	OFF	OFF	ON		ON
CC 8	Address 8	OFF	OFF	OFF	ON		ON

Table 22: Cmd Center # Dipswitch Settings

CC# Supervised

Default: See Program Record Sheet

Selections: Yes or No

Supervise this SDI address and generate TROUBLE SDI reports and local trouble annunciation if a problem occurs with this command center or the SDI bus.

	Yes	Only one command center can be installed for this CC SDI address.			
Ī	No	More than one command center can be installed using this CC SDI address using the same			
		address dipswitch setting.			

Note: Command centers sharing the same address setting will display the same text and emit the same tones regardless of which command center keys are being pressed.

TROUBLE SDI # reports are always reported as Area 1, Account 1 events regardless to which area the SDI device is assigned.



When this prompt is Yes, you cannot have duplicate dipswitch settings.



When a D1260 Alpha V Command Center is assigned to a command center address, you must program CC# Supervised as Yes.

CC# Area Assign

Default: 1 Selections: 1 – 4

(Blank) is not a valid entry.

Enter the Area # in which you are installing this command center or command centers with this address and the same dipswitch settings.



The D7212G allows up to only four areas. Although the D5200 allows entries for Areas 5 through 8, they are not applicable for use on the D7212G.

If Areas 5 through 8 are inadvertently programmed on the D7212G, the command center will display CALL FOR SERVICE.

CC# Scope

Default: See Program Record Sheet

Selections: Panel Wide, Custom, No Keypad, Area, Account

This program item is used to define what areas will be affected when this command center is armed, what areas can be viewed with this command center, and what areas this command center can move to.

Press [SPACE] bar to scroll through the selections. Press [ENT] when the correct selection appears in the display.

Panel Wide	A Panel Wide command center can view information and perform arming and disarming functions for all areas in the panel. A Panel Wide command center can cross account boundaries. This is normally used with a Master Area.			
Account	An Account command center can view information, and perform arming and disarming functions for all areas that have the same <i>A# Acct Number</i> , in Area Parameters. This is normally used for an Associate area.			
Area	An Area command center is restricted to the viewing information and arming/disarming functions for the area to which it is assigned.			
Custom	A Custom command center has no command center restrictions.			
No Keypad	No command center installed at this address. CALL FOR SERVICE will display indicating that the panel is not polling this address.			

Table 23: Command Center Scope



In applications where command centers include the scope of more than one area, please note that active alarms in remote areas must be acknowledged prior to arming or disarming the local area.

Note:

The following prompts are visible ONLY when you program CC## Scope to <u>Custom</u>. If the scope was previously programmed to be other than No Keypad, defaults settings based on the previous Scope will appear. Prior to exiting a custom program, check each area and ensure they are properly enabled and disabled.

CC# A1	[through A4] In Scope

Default: See Note above Selections: Yes or No

This program item determines whether any of the four areas (Area 1-4) will be included in the scope of this command center for viewing status, arming, or disarming.

Yes	Include this area in the scope of this command center.
No	Do not include this area in the scope of this command center.



The D7212G allows up to only four areas. Although the D5200 allows entries for Areas 5 through 8, they are not applicable for use on the D7212G.

If Areas 5 through 8 are inadvertently programmed on the D7212G, the command center will display CALL FOR SERVICE.

CC# Entr Key Rly

Default: (Blank)

Selections: 1 - 24, A, B, C, (Blank)

Enter Key Relay. Program the relay number which will momentarily activate for 10 seconds when a user enters a valid passcode and presses the [ENT] key on the command center. Two events are generated when this function is used:

RELAY ### SET with User ID and, RELAY ### RESET without User ID.

(Blank)	The [ENT] key will not be used to cycle a relay.
1 - 24, A, B, C	Assign the relay number that activates when [ENT]is pressed at this command center after the user enters a valid passcode.



When programmed to activate a relay, the [ENT] key cannot be used for any other function.

Relays used for this function must not be shared with any other point, sensor reset, panel or bell functions. This may cause erroneous relay operation.



- 1. Entering a valid code and pressing [ENT] will silence a bell if one is ringing.
- 2. Use this function for a low-level access control strike on a door. This will not shunt a point.
- 3. This action will be logged as two events, Relay Set and Relay Reset.

CC# Entr Cycl Dr

Default: No Selections: Yes or No

Note: Not available with D7212G. Leave set to default.

CC# Assign Door

Default: (Blank) Selections: 1 - 8, (Blank)

Note: Not available with D7212G. Leave default.

CC# Trouble Tone

Default: Yes Selections: Yes or No

Determine whether this command center, or any command center with the same address setting, will emit the *panel wide trouble tones* (power, phone, SDI bus and Zonex bus).

Yes	Panel wide trouble tones will sound and visual displays will show at this command center.
No	Panel wide troubles will not sound. Visual displays still show.

Note: Panel wide trouble tones do not include point troubles, buzz on fault, or close door now (this event not available with D7212G).



Assign two CC's to the same area to have one command center emit the tone while another does not.

CC# Entry Tone

Default: Yes

Selections: Yes or No

Determine whether this command center or any command center with the same address setting, will emit the DISARM NOW entry delay tone. Any delay point within the area scope of this command center will initiate the entry sequence.

3 3	31	-	
Yes	This command center will sound entry tones.		
No	This command center will not sound entry tones.		



This prompt allows you to manage the tone by command center. Entry Tone can also be turned off when programming your P## Entry Tone Off in Point Index.



Assign two CC's to the same area to have one command center emit the tone while another does not.

CC# Exit Tone

Default: Yes Selections: Yes or No

Determine whether this command center or any command center with the same address setting, will emit the EXIT NOW ### exit delay tone during the delay arming of an area(s). Any command center that has a scope to arm this area can initiate the exit tone sequence.

Yes	This command center will sound entry tones.
No	This command center will not sound entry tones.



This prompt allows you to manage the tone by command center. Exit Tone can also be turned off when programming your A# Exit Tone in Area Parameters.



Assign two CC's to the same area to have one command center emit the tone while another does not.

CC# Arm Now Warn

Default: No Selections: Yes or No

Determine whether this command center will sound an audible tone and display the PLEASE CLOSE NOW warning on the command center when a *closing window* has activated indicating that the area will automatically arm soon.

Yes	This command center will activate a tone and display PLEASE CLOSE NOW.
No	This command center will not activate the tone or display PLEASE CLOSE NOW.

CC# Close Door

Default: No Selections: Yes or No

Note: Not available with D7212G. Leave set to default.

CC# EnhancCmdCtr

Default: No

Selections: Yes or No

When a D1260 Alpha V Command Center is installed at this command center address, this item must be set to Yes. This instructs the control/communicator to send additional information to the D1260 that is required for proper operation.

Yes	This command center is a D1260 Alpha V Command Center.
No	This command center is not a D1260 Alpha V Command Center.



Remember to program CC# Supervised to Yes if a D1260 Alpha V Command Center is installed at this address. Failure to follow this programming requirement will result in improper operation of the D1260.

2.10.2 Area Text

This programming category allows you to create custom "Idle Text" displays for the command centers.

Note: Each display can be programmed with up to sixteen Alphanumeric characters, including: A-Z, 0-9, ?, &, @, -, *, +, S, #, _, /.



Invalid Characters:

Those characters not listed above are invalid and cannot be used for text.

Area

Default: 1 Selections: 1 – 4

Enter the Area Number you are programming.



The D7212G allows up to only four areas. Although the D5200 allows entries for Areas 5 through 8, they are not applicable for use on the D7212G.

If Areas 5 through 8 are inadvertently programmed on the D7212G, the command center will display CALL FOR SERVICE.

Area # Is On

Default: See Program Record Sheet

Selections:

Enter the text *for this area* that displays when the area is master armed or master instant armed and there are other areas that share the same account number that are not yet master armed. This display will not appear when the area is Perimeter armed.

Area # Not Ready

Default: See *Program Record Sheet*Selections: 16 Alphanumeric characters

Enter the text for this area that displays when the area is disarmed but points are faulted.

Area # Is Off

Default: See *Program Record Sheet*Selections: 16 Alphanumeric characters

Enter the text for this area that displays when the area is disarmed and no points are faulted.

Area # Acct Is On

Default: See *Program Record Sheet*Selections: 16 Alphanumeric characters

Enter the text that displays when all areas sharing the same account number have been Master armed. The ACCT IS ON text appears at all command centers that are assigned to these areas if more than one area has the same account number. The ACCT IS ON text will also appear if only one area in the system is used. (See *Cmd Cntr Assignment CC Area*, and *Area Parameters Account Number*.)

When all areas in the account are master armed, the Area # Is On text is replaced by the ACCT IS ON text if the area was armed prior to all the areas with the same account number being armed.



A (Blank) entry disables the ACCT IS ON display for this area allowing an account wide area to display the AREA # IS ON text instead of the ACCT IS ON text.



Each area can have unique ACCT IS ON text, or you can program the same text in each area of the account so that when all the areas in the account are armed, they all show the same text.



D1260 Alpha V Command Center Programming Note:

Although it is not programmed in this area, the new D1260 Alpha V Command Center has the capability to display up to 16 characters for an Area Name on line 1 of its display. The Area Text (Area # Is Off, Area # Not Ready, Area # Is On, and Acct # Is On) programmed in this module appears on line 2 of the D1260 Alpha V Command Center. Therefore, consideration should be given when programming this text so that it makes sense to an end user when viewing it on the D1260. For example, the Area Name Text could be programmed to display "Front Office" and the Area # Is Off text (programmed in this section) could be programmed to display "Ready To Arm". The D1260 would then show on line 1 Front Office and on line 2, Ready To Arm.

2.10.3 Custom Function

Custom Functions are a way to simplify use of complex keystroke sequences that can be entered at the command center. These items are similar to "speed dialing" on a telephone – in other words, a custom function can automatically initiate an end user request with one push of the [ENT] once the custom function text is displayed on the command center. You can have up to sixteen Custom Functions and restrict the use of these by area and authority level.

Each *Custom Function ###* item has a sixteen character programmable text (*CF### Text*). When the custom function is assigned to the menu *M## Function* (refer to *Section 2.12 Function List* on page 75) the user can press [PREV] or [NEXT] to scroll to the *CF### Text*. The user accesses the menu by pressing [MENU] on the command center.

The user must have the appropriate authority level enabled for the *L## C Function 128-131* in *Section 2.11 User Interface* on page 58, to be capable of using the custom function.

The *Scope* of the command center used to access the Custom Function item must also be considered. Each Custom Function is enabled in the function menu by *M# CC Address 1 [through 8]*. If the Custom Function is not assigned to a specific command center address, it will not appear in the menu.

Custom Function

Default: 128 Selections: 128 – 131

Enter the Custom Function number you want to program. You can program up to four Custom Functions, which are numbered 128 to 131.



Custom Functions 132 through 143 are not available with D7212G.

CF### Text

Default: See Program Record Sheet

Selections: See *Area Text* on page 54 for valid character entries.

16 Alphanumeric characters

This entry determines the menu text displayed at the command center for the Custom Function item. Use this text to represent the functions performed by this menu item.

CF### Key Strokes

Default: See Program Record Sheet

Selections: Up to 32 Characters: 0 – 9, A, B, C, D, and E.

The keystrokes simulate any sequence of keystrokes the user can perform at a command center. You can program up to 32 keystrokes for each Custom Function. Use *Table 25* to enter appropriate keystrokes.

		1.1	1 3
Selection	=	Key	Faceplate Label
0 - 9	=	0 - 9	
A	=	COMMAND	
В	=	PREV (Previous)	up arrow
C	=	ESC (Escape)	MENU
D	=	NEXT	down arrow
E	=	ENT (Enter)	YES

Table 24: CF### Key Strokes



D5200 Data Entry:

Use the D5200 down-arrow key to move the cursor to the first data entry line. When you want to enter more than sixteen keystrokes, the first line of the data entry line must be filled before you move on to the second line. If you make entries on the second line, and the first line has less than sixteen characters, the second line clears when you press [ENT].



Command Center Scope affects how a Custom Function executes

The Scope of the command center where the Function List is accessed can affect the way the Custom Function operates.

2.10.3.1 Programming Custom Function Keystrokes

- First find the command you want to execute on the *User Interface* page of the *Program Record Sheet*.
- Single digit commands must be programmed with "9" as the second digit.

Command	Keystroke	Command	Keystroke
1 (Master Arm Area)	A19	7 (Special Alert)	A79
2 (Perimeter Instant Arm)	A29	8 (Perimeter Partial Arm)	A 8 9
3 (Perimeter Delay Arm)	A39	9 (Special Alert)	A 9 9
6 (Watch Mode)	A 6 9	0 (Bypass a Point)	A 0 9

Table 25: CF### Custom Function Keystrokes

• #128 - #131 Enable Custom Function 128 through 131, [MENU FUNCTION only] This function determines whether a passcode will be required (or not) when attempting to access a Custom Function from the menu list. ENTER PASSCODE (or Enter Passcode + Enter Key on the D1260) will be displayed when this function is passcode protected.



If a command within the Custom Function is passcode protected, the command center will display ENTER PASSCODE and wait for the user to enter a valid passcode before proceeding with the rest of the Custom Function. If a passcode is not entered within 10 seconds, the Custom Function times out and the display returns to idle text.



For the reason noted in the above Programming Tip, Skeds cannot execute custom functions that are passcode protected. D720 LED Command Center does not support Custom Functions that are passcode protected.

- Some functions cannot be entered directly because they are nested inside a higher level function. To automatically execute these functions, you have to add appropriate keystrokes.
- For example: In the Change Display (CMD 49) function there are three sub-functions; Bright Display, Dim Display, and Date/Time Display.

• Custom Functions can perform several tasks at once. For example:

To program multiple area arming or disarming functions, use keystroke sequences including [COMMAND][50] (Move to Area) and [COMMAND][1].



Custom Function cannot be used to change time (e.g., Daylight Savings Time). Instead, use Skeds S## Function Codes 13 and 14 to adjust for Daylight Savings Time (refer to page 119 and 119).

2.11 User Interface

Use this section to define which functions can be used by each of the fourteen user authority levels. Each user can be assigned the same or different authority level by area. The user has rights in the area in which the command center is assigned based on the authority level assigned to the user's passcode for that area.

When the passcode is entered at the command center, the panel checks the authority level. The panel executes the function only in areas where the passcode has the authority to use the function.

2.11.1 Commands

"Commands" is the same method of command initiation used in previous Bosch Security Systems products. This method is made available to provide continuity in the arming commands across the product line and to make an easy transition for dealers using other Bosch Security Systems products. With Commands, the end user presses [COMMAND] and then the numeral of the command they want to initiate. For example, [COMMAND][2] arms the perimeter of the area. Some prompts can only be accessed from a menu and will be noted as such by [MENU FUNCTION only]. To access these functions, press [MENU], enter the function number and then use the [PREV] and [NEXT] keys to scroll through the choices.

The *D7212G Program Record Sheet* (P/N: 4998138542) lists the commands available with the system. Command numbers are shown in the third column (labeled "Command") next to the function name. If a particular function does not have a command number, it can only be accessed through the Function List.

If the end user is going to use <u>only</u> commands to operate their system, along with arming and disarming by entering a passcode, then you do not need to program *Custom Function* or *Function List*.

2.11.2 Command Center Selections

Programming choices in this section determine if command center functions are disabled (Blank), enabled (E), or restricted (P) panel wide.

Press [SPACE] bar to scroll through the selections. Press [ENT] when the correct selection appears in the display.

(Blank)	Disable the function panel wide. Accessing the function using a Command or the Function List displays NO AUTHORITY.
E	Enable the function panel wide . The function can be executed without entering a passcode.
P	Passcode required . When the passcode is entered at the command center, the panel checks the user's authority level. See <i>Authority Lvl Assign</i> .

Table 26: Command Center Programming Choices

Note: See the Authority Levels Selection area of this section for a detailed description of the functions on the following pages. These parameters only determine if the authority level functions will be passcode protected.

Master Arm Delay	

Default: P

Selections: (Blank), E, or P

#2 Master Arm Delay, (CMD 1 [COMMAND][1]). This arming function allows a user to Master arm areas that are disarmed. If Enabled, the following arming choices are available to the user with this authority.

Example of how these items are programmed and how it will affect the end user:	
P	Passcode will be required for all users that have Master Arm Delay enabled for their authority level.
E	Enable does not require a user to have a passcode to use [COMMAND][1].
(Blank)	Disable Master Arm Delay can not be accessed in the function menu nor initiated with a Command regardless if the user has this function enabled for their authority level.

Table 27: Master Arm Delay Programmable Examples

Mstr Arm Inst

Default: (Blank)

Selections: (Blank), E, or P

#3 Master Arm Instant, (CMD 11 [COMMAND][1][1]). This arming function allows a user to Master arm instant areas that are disarmed. If Enabled, the following arming choices are available to the user with this authority. Entry and exit delays ARE NOT provided with this arming function. This causes a perimeter and interior delay point to act as an instant point.

Perim Instant

Default: P

Selections: (Blank), E, or P

#4 Perimeter Instant Arm, (CMD 2 [COMMAND][2]). This function Instant arms all perimeter points that have a P## Point Response that initiates an instant alarm (see P## Pt Response on page 91) in the area where the command center is assigned. Entry and exit delays ARE NOT provided with this arming function. This causes a perimeter delay point to act as a perimeter instant point.

Perim Delay

Default: P

Selections: (Blank), E, or P

#5 Perimeter Delay Arm, (CMD 3 [COMMAND][3]). This function delay arms all perimeter points in the **area** where the command center is assigned. Entry and exit delays are provided with this arming function. *This will not cause a perimeter instant point to act as a delay point.*

Watch Mode

Default: E

Selections: (Blank), E, or P

#6 Watch Mode, (CMD 6 [COMMAND][6]). This function lets you know when a perimeter and interior point programmed as *P## Watch Point* has faulted while the point is disarmed. Interior Points will not emit a Watch Tone if the area is Perimeter Armed. This function provides command center audible/visual and optional relay activation (see *A # Watch Mode* in *Section 2.13.1 Area Relays* on page 77 of this guide).

Perim Partial

Default: P

Selections: (Blank), E, or P

#7 Perimeter Partial Arm, (CMD 8 [COMMAND][8]). This function arms normal perimeter points only while other faulted perimeter points programmed as *P## Bypassable* are ignored. Entry and exit delays are provided with this arming function.



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This function ignores the A# FA Bypass Max entry in Area Parameters.



Application Note No closing report is sent to the central station, but a PERIMETER DELAY closing event is generated in the event log.

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User Interface

View Area Stat

Default: P

Selections: (Blank), E, or P

#8 View Area Status, [MENU FUNCTION only]. This function allows the user to view the armed status of all areas within the scope of the command center assigned to this area. The armed states include; A# AREA # IS OFF (disarmed), A# AREA # IS ON (master delay armed), ALL ON INSTANT (master instant armed), and AREA # PERIM ON (perimeter instant armed or perimeter delay armed). All area types, Master, Associate, Regular and Shared can be viewed using this function.

View Memory

Default: E

Selections: (Blank), E, or P

#9 View Event Memory, (CMD 40 [COMMAND][4][0]). This function allows the user to view prior alarm, trouble, and supervisory activity that occurred since the last time the system was armed. Event memory is not cleared until the area is re-armed.

View Pt Status

Default: E

Selections: (Blank), E, or P

#10 View Point Status, [MENU FUNCTION only]. This function allows the user to view points assigned to the area where the command center is assigned. This function shows point text and the electrical condition (normal, open, short and missing) of each point in the area.

Walk Test

Default: E

Selections: (Blank), E, or P

#11 Walk Test, (CMD 44 [COMMAND][4][4]). This function allows the user to test *controlled* points in areas within the command center's *Scope* without sending reports to the central station. *24 hour points* can not be tested using this walk test mode.

Fire Test

Default: P

Selections: (Blank), E, or P

#12 Fire Test, (CMD 58 [COMMAND][5][8]). This function allows the user to test 24-hour points in areas within the *Scope* of the command center where the function is entered. *Controlled points, P## Type 1, 2, 3*, can not be tested using the fire walk test mode.

Send Report

Default: P

Selections: (Blank), E, or P

#13 Send Report, (CMD 41 [COMMAND][4][1]) or (CMD 42 [COMMAND][4][2]). This function allows the user to test the communication link between the panel and the central station receiver(s). It can send a test report or a status report to the phone numbers as programmed in *Phone Routing*. The test report includes additional information if *Expand Test Rpt* is enabled in *Section 2.1 Phone* on page 11.

2.11.2.1 Access Control Functions

Door Control

Default: P

Selections: (Blank), E, or P

This function is not available with D7212G. Leave set to default.

Access Ctl Level

Default: I

Selections: (Blank), E, or P

This function is not available with D7212G. Leave set to default.

Chg Display

Default: E

Selections: (Blank), E, or P

#15 Change Display, (CMD 49 [COMMAND][4][9]). This function allows the user to select either a bright or dim display with loud or soft command center warning tones. It also allows the user to choose the time/date display.

Chg Time/Date

Default: E

Selections: (Blank), E, or P

#16 Change Time and Date, (CMD 45 [COMMAND][4][5]). This function allows the user to set the time and date in the panel.

Chg Passcode

Default: P

Selections: (Blank), E, or P

#17 Change Passcodes, (CMD 55 [COMMAND][5][5]). This function allows the user to change their passcode. This is a panel wide function that can be executed from any command center assigned to an area where the user has authority.

Note: Regardless of whether an E or a P is placed here and a CMD 55 is performed, the command center will prompt the user to enter their existing passcode first.

Add User

Default: P

Selections: (Blank), E, or P

#18 Add User, (CMD 56 [COMMAND][5][6]). This function allows a user to add/change passcodes and add/change panel authority levels (L##) by area.

Del User

Default: P

Selections: (Blank), E, or P

#19 Delete User, (CMD 53 [COMMAND][5][3]). This function allows a user to delete a user's passcode

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User Interface

Extend Close

Default: P

Selections: (Blank), E, or P

#20 Extend Close, (CMD 51 [COMMAND][5][1]). This function allows the user to change the expected closing time for the area. The window cannot be adjusted until the *Close Early Begin* time has passed and the closing window is active.

View Log

Default: E

Selections: (Blank), E, or P

#21 View Log, [MENU FUNCTION only]. This function allows the user to view all of the main events (e.g., WALK TEST) and the main event modifiers (e.g., BY USER) in the event log memory. USER NAME and POINT TEXT are NOT stored in the event log but will appear when the panel matches them with the user ID ### and the point ### (respectively).

Each main event takes up one line in the log. Each modifier also takes up a line in the log.

The log in the panel can store between 500 and 1,000 events in the panel log.

Print Log

Default: P

Selections: (Blank), E, or P

#22 Print Event Log, [MENU FUNCTION only]. This function allows the user to print all of the events stored in the panel starting with a start date and ending with the last event in the log.

User Cmd 7

Default: P

Selections: (Blank), E, or P

#23 User Command 7, (CMD 7 [COMMAND][7]). This function allows the user to activate an alarm programmed in *Cmd* 7 in the RADXPNTS Handler.

User Cmd 9

Default: P

Selections: (Blank), E, or P

#24 User Command 9, (CMD 9 [COMMAND][9]). This function allows the user to activate an alarm programmed in *Cmd* 9 in the RADXPNTS Handler.

Bypass a Pt

Default: P

Selections: (Blank), E, or P

#25 Bypass a Point, (CMD 0 [COMMAND][0]). This function allows the user to bypass individual points that are *P## Bypassable*. Points within the *Scope* of the command center can be bypassed where the function is entered (refer to *Section 2.10.1 Cmd Cntr (Command Center) Assignment* on page 50).

The panel will ignore alarms/troubles and not display point faults when a point is bypassed.

Unbypass a Pt

Default: P

Selections: (Blank), E, or P

#26 Unbypass a Point, (CMD 00 [COMMAND][0][0]). This function allows the user to unbypass individual points that are programmed either *P## FA Returnable* or *P## Bypass Returnable*. Points within the *Scope* of the command center can be unbypassed where the function is entered (refer to *Section 2.10.1 Cmd Cntr (Command Center) Assignment* on page 50).

The panel will respond to alarms/troubles and display point faults when a point is unbypassed.

Reset Sensors

Default: E

Selections: (Blank), E, or P

#27 Reset Sensors, (CMD 47 [COMMAND][4][7]). This function allows the user to activate the Reset Sensors function for fire or intrusion points programmed as *P## Resettable* in *Section 4.1 Point Index* on page 87. Points within the *Scope* of the command center where the function is entered will be reset (refer to *Section 2.10.1 Cmd Cntr (Command Center) Assignment* on page 50).

Change Relay

Default: P

Selections: (Blank), E, or P

#28 Change Relays, (CMD 54 [COMMAND][5][4]). This function allows the user to manually set and reset relays 1 through 24 installed in the system.

Remote Program

Default: P

Selections: (Blank), E, or P

#29 Remote Programming. (CMD 43 [COMMAND][4][3]). This function allows the user to initiate Remote Account Manager sessions. When the phone is ringing at the panel, the user initiates this function to have the panel seize the line.

Move to Area

Default: P

Selections: (Blank), E, or P

#30 Move to Area, (CMD 50 [COMMAND][5][0]). This function allows the user to temporarily switch the command center's assignment to a different area. This can be used to perform any function that can be performed by a command center assigned to the area in programming.

Users are limited to performing functions enabled by the authority level they have in the area to which the command center is moved. After 15 seconds of no activity at the keypad, the command center reverts back to the originally programmed area.

Display Rev

Default: E

Selections: (Blank), E, or P

#32 Display Software Revision, (CMD 59 [COMMAND][5][9]). This function allows the user to show the panel's software revision number in the command center display.

Service Walk

Default: P

Selections: (Blank), E, or P

#33 Service Walk Test, [MENU FUNCTION only]. This function allows a user to walk test all 246 points in the entire panel regardless of the P## Type.

Note: The D7212G must have the Service Walk Test function enabled in the Function List in order for the Service Walk

Test to be accessed.

Default Text

Default: P

Selections: (Blank), E, or P

#34 Default Text, (CMD 57 [COMMAND][5][7]). It may be difficult to determine the armed state of an area using the programmed custom text. This function allows the user to temporarily switch to the panel default text, shown on the program record sheet.

Change Skeds

Default: P

Selections: (Blank), E, or P

#35 Change Skeds, (CMD 52 [COMMAND][5][2]). This is a **panel wide** function that can be executed from any command center assigned to an area where the user has authority. This function allows the user to change the *S## Time* from the command center to make adjustments to Skeds.

2.11.2.2 Custom Functions

C Function 128 [through 131]

Default: F

Selections: (Blank), E, or P

#128 - #131 Enable Custom Function 128 through 131, [MENU FUNCTION only] This function determines whether a passcode will be required (or not) when attempting to access a Custom Function from the menu list. ENTER PASSCODE (or Enter Passcode + Enter Key on the D1260) will be displayed when this function is passcode protected. If a command within the Custom Function is passcode protected, the command center will display ENTER PASSCODE (or Enter Passcode + Enter Key on the D1260) and wait for the user to enter a valid passcode before proceeding with the rest of the Custom Function. If a passcode is not entered within 10 seconds, the Custom Function times out and the display returns to idle text.



Custom Functions 132 through 143 are programmable, but only Custom Functions 128 through 131 are available with D7212G.

2.11.3 Authority Level Selections

The Authority Level section allows you to determine which Authority Level will have access to Command Center Functions that are Passcode Protected. You do not need to select "Enable items" in the Authority Level section if the Command Center Function is Disabled or Enabled. There are two selections you can use for each individual function for the authority level you are programming.

Press [SPACE] bar to scroll through the selections. Press [ENT] when the correct selection appears in the display.

(Blank)	Disabled This function will not be authorized for the user who is assigned this authority level.
E	Enabled This function is authorized for the user who is assigned this authority level.

Table 28: Authority Level Selections

Authority Level

Default: 1 **Selections:** 1 – 14

Enter the number of the authority level you want to program. Authority Level 15 (Service Passcode) cannot be edited.

L## Disarm

Default: See Program Record Sheet

Selections: (Blank) or E

#1 Disarm. The disarming function allows a user to disarm areas that are master armed or perimeter armed. If Enabled, the following disarming choices are available to the user with this authority.

DISARM ALL disarms all areas within the *CC# Scope* of the command center being used by

accessing the function menu and the Authority Level of the user performing the

function.

DISARM AREA disarms only the area that is displayed.



There are many options available on how a user can arm and disarm. This is dependent upon A# Area Type and CC# Scope. Read the definitions of the Area Type in the Area section and CC# Scope in the Command Center section of this guide.

L## Master Arm Delay

Default: See Program Record Sheet

Selections: (Blank) or E

#2 Master Arm Delay, (CMD 1 [COMMAND][1])

Master arms areas based on the *CC# Scope* of the command center being used with an exit delay time.

When this item is accessed through the Function List, **Master Arm All** allows the user to arm all areas according to the Authority Level of the user and within the *CC# Scope* of the command center being used with an exit delay time.

Arm Area arms only the area displayed.

If CMD1 is used, it arms only the area to which the command center is assigned.

L## Mstr Arm Inst

Default: See Program Record Sheet

Selections: (Blank) or E

#3 Master Arm Instant, (CMD 11 [COMMAND][1][1])

When this item is accessed through the Function List, **Master Arm Inst** allows the user to arm all areas according to the user's Authority Level and within the *CC# Scope* of the command center being used without an exit delay time by accessing the function menu.

Arm Area arms only the area to which the command center is assigned.

If CMD 11 is used, it arms only the area to which the command center is assigned.



Careful consideration must be given when allowing CMD 11 as all perimeter and Interior points become Instant Armed.

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User Interface

L## Perim Instant

Default: See Program Record Sheet

Selections: (Blank) or E

#4 Perimeter Instant Arm, (CMD 2 [COMMAND][2])

Perimetr Inst allows the user with this *L*## to instant arm all perimeter points, including delayed points, only in the area to which the command center is assigned.

L## Perim Delay

Default: See Program Record Sheet

Selections: (Blank) or E

#5 Perimeter Delay Arm, (CMD 3 [COMMAND][3])

Perimetr Delay allows the user with this L## to delay arm all perimeter delay point responses only in the area to which the command center is assigned.

L## Watch Mode

Default: See Program Record Sheet

Selections: (Blank) or E

#6 Watch Mode, (CMD 6 [COMMAND][6])

Watch Mode allows the user with this L## to initiate the watch mode in the area to which this command center is assigned.

L## Perim Partial

Default: See Program Record Sheet

Selections: (Blank) or E

#7 Perimeter Partial Arm, (CMD 8 [COMMAND][8])

Perimetr Part allows the user with this L## to partial arm only the area to which the command center is assigned.



This function ignores the A# FA Bypass Max entry in Area Parameters.



Programming Note

Local Only Reporting:

No closing report is sent to the central station, but a PERIMETER DELAY closing event is generated in the event log.

L## View Area Stat

Default: See Program Record Sheet

Selections: (Blank) or E

#8 View Area Status, [MENU FUNCTION only]

View Area Stat allows the user with this L## to view the current arm/disarm and not ready to arm status of all areas within the scope of the command center in this area. The user must have arming/disarming authority.

L## View Memory

Default: See Program Record Sheet

Selections: (Blank) or E

#9 View Event Memory, (CMD 40 [COMMAND][4][0])

View Memory allows the user with this L## to view all memory events that have occurred since the last time the system was armed for all areas within the scope of the command center in this area.

L## View Pt Status

Default: See Program Record Sheet

Selections: (Blank) or E

#10 View Point Status, [MENU FUNCTION only]

View Pt Status allows the user with this L## to view the current status of all points in the area to which this command center is assigned.

L## Walk Test

Default: See Program Record Sheet

Selections: (Blank) or E

#11 Walk Test, (CMD 44 [COMMAND][4][4])

Walk Test allows the user with this L## to initiate a walk test for all *interior/perimeter controlled* points in the area to which this command center is assigned.

The following features are provided with the Walk Test Mode:

- During this test, the battery is powering the panel only. A battery test is initiated during the full duration of the test to ensure the battery capacity is capable of supporting the full load of the panel while AC is failed.
- This test includes an initial 2-second bell test when starting the walk test.
- The test ends once all points are tested or until the test times out in 20 minutes of no activity.
- Local alarm annunciation and event printing without reporting to the central station receiver.
- D1255 command center displays a sequential count after each point is activated and restored as well as the text for the point.
- The command center displays ALL PTS TESTED and an ALL POINTS TESTED event is reported to the central station receiver (if programmed) when the last point is tested.
- If enabled in Routing, WALK START and WALK END are reported at the central station receiver for the beginning and end of the test.

L## Fire Test

Default: See Program Record Sheet

Selections: (Blank) or E

#12 Fire Test, (CMD 58 [COMMAND][5][8])

Fire Test allows the user with this L## to initiate a Fire walk test for all *24-Hour* points in the area to which this command center is assigned.

When a Fire Test is initiated one person can typically test a fire system without assistance. The following features are provided with the Fire Test Mode:

- During this test, the battery is powering the panel only. A battery test is initiated during the full duration of the test to ensure the battery capacity is capable of supporting the full load of the panel while AC is failed.
- This test includes a 2-second bell test (fire bell relay) for each fire point that is tested.
- The test ends once all points are tested or until the test times out in 20 minutes of no activity.
- Local alarm annunciation and event printing without reporting to the central station receiver.
- Automatic smoke detector reset SENSORS RESETTING for all fire points programmed with P##
 Resettable as Yes.
- D1255 command center displays a sequential count after each point is activated and restored as well as the text for the point.
- If enabled in Routing, FIRE WALK START and FIRE WALK END are reported at the central station receiver for the beginning and end of the test.



A# Verify Time for fire points programmed with P## Alarm Verify as Yes is ignored during the Fire walk test.

L## Send Report

Default: See Program Record Sheet

Selections: (Blank) or E

#13 Send Report, (CMD 41/42 [COMMAND][4][1] or [COMMAND][4][2])

Send Report allows the user with this L## to send a test report from any command center assigned to an area where the user has authority.

2.11.3.1 Access Control Functions

The following functions enable the user to control the doors using the command center. Users can have authority to access the Door Control and have the ability to use either all or part of the functions within.

Note: All doors will display when this function is chosen. This function does not follow the scope of the command center.

L## Door Control

Default: See Program Record Sheet

Selections: (Blank) or E

Note: Not available with D7212G. Leave set to default.

L## Cycle Door

Default: See Program Record Sheet

Selections: (Blank) or E

Note: Not available with D7212G. Leave set to default.

L## Unlock Door

Default: See Program Record Sheet

Selections: (Blank) or E

Note: Not available with D7212G. Leave set to default.

L## Secure Door

Default: See Program Record Sheet

Selections: (Blank) or E

Note: Not available with D7212G. Leave set to default.

L## Access Ctl Lvl

Default: See Program Record Sheet

Selections: (Blank) or E

Note: Not available with D7212G. Leave set to default.

L## Chg Display

Default: See Program Record Sheet

Selections: (Blank) or E

#15 Change Display, (CMD 49 [COMMAND][4][9]).

Chg Display allows the user with this L## to change the display (bright display, dim display, time display) in the area to which this command center is assigned.

L## Chg Time/Date

Default: See Program Record Sheet

Selections: (Blank) or E

#16 Change Time and Date, (CMD 45 [COMMAND][4][5]).

Chg Time/Date allows the user with this L## to change the date and time for the panel in this area.

L## Chg Passcode

Default: See Program Record Sheet

Selections: (Blank) or E

#17 Change Passcodes, (CMD 55 [COMMAND][5][5]).

Chg Passcode allows the user with this L## to change a user passcode.

L## Add User

Default: See Program Record Sheet

Selections: (Blank) or E

#18 Add User, (CMD 56 [COMMAND][5][6]).

Add User allows the user with this L## to add/change users, add/change authority levels.

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User Interface

L## Del User

Default: See Program Record Sheet

Selections: (Blank) or E

#19 Delete User, (CMD 53 [COMMAND][5][3]).

Delete User allows the user with this L## to delete users.

L## Extend Close

Default: See Program Record Sheet

Selections: (Blank) or E

#20 Extend Close, (CMD 51 [COMMAND][5][1]).

Extend Closing allows the user with this L## to change the closing time in the area where the function is entered.

L## View Log

Default: See Program Record Sheet

Selections: (Blank) or E

#21 View Log, [MENU FUNCTION only].

View Log allows the user with this L## to view all panel wide events in the panel's memory log.

L## Print Log

Default: See Program Record Sheet

Selections: (Blank) or E

#22 Print Event Log, [MENU FUNCTION only].

Print Log allows the user with this L## to print all panel wide events from the log to the printer in the area from which the user is executing this function.

Note: This item can also be accessed using the Service Menu (99+ENT).

L## User Cmd 7

Default: See Program Record Sheet

Selections: (Blank) or E

#23 User Command 7, (CMD 7 [COMMAND][7]) can be used in Function Menu.

User Cmd 7 allows the user with this L## to generate the alarm programmed at CMD 7 in the RADXPNTS Handler.

L## User Cmd 9

Default: See Program Record Sheet

Selections: (Blank) or E

#24 User Command 9, (CMD 9 [COMMAND][9]) can be used in Function Menu.

User Cmd 9 allows the user with this L## to generate the alarm programmed at CMD 9 in the RADXPNTS Handler.

L## Bypass a Pt

Default: See Program Record Sheet

Selections: (Blank) or E

#25 Bypass a Point, (CMD 0 [COMMAND][0]).

Bypass a Point allows the user with this L## to bypass points.

L## Unbypass a Pt

Default: See Program Record Sheet

Selections: (Blank) or E

#26 Unbypass a Point, (CMD 00 [COMMAND][0][0]).

Unbypass a Point allows the user with this L## to unbypass points.

L## Reset Sensors

Default: See Program Record Sheet

Selections: (Blank) or E

#27 Reset Sensors, (CMD 47 [COMMAND][4][7]).

Reset Sensors allows the user with this L## to reset sensors.

L## Change Relay

Default: See Program Record Sheet

Selections: (Blank) or E

#28 Change Relays, (CMD 54 [COMMAND][5][4]).

Chg Relays allows the user with this L## to set RELAY ON? and reset RELAY OFF? relays in the panel.



DO NOT attempt to use the Chg Relays? function to toggle relays reserved for special functions. Special function relays are Area and Panel Wide relay functions as well as relays assigned to CC# Entr Key Rly?.

L## Remote Program

Default: See Program Record Sheet

Selections: (Blank) or E

#29 Remote Programming, (CMD 43 [COMMAND][4][3]).

Remote Program allows the user with this L## to initiate a RAM session once the phone is ringing at the panel.

L## Move to Area

Default: See Program Record Sheet

Selections: (Blank) or E

#30 Move to Area, (CMD 50 [COMMAND][5][0]).

Move To Area allows the user with this L## to temporarily switch to a different area and perform command center functions related to the area to which the command center is switched.

L## Display Rev

Default: See Program Record Sheet

Selections: (Blank) or E

#32 Display Software Revision, (CMD 59 [COMMAND][5][9]).

Display Rev allows the user with this L## to display the panel software revision D7212G REV ##.##.

L## Service Walk

Default: See Program Record Sheet

Selections: (Blank) or E

#33 Service Walk Test, [MENU FUNCTION only].

Service Walk allows the user with this L## to initiate a service walk test for all 24-Hour interior/perimeter controlled points in the panel.

Points will not be included in this test if:

- Points are in an area that is already in any walk test mode.
- Points are assigned to an area that is not enabled, *A# Area On*.
- Points are in an area that is Master or Perimeter armed.

When a Service Walk Test is initiated, one person can test all the points in the panel without assistance. The following features are provided with the Service Test Mode:

- Display tells you exactly how many points can be tested.
- A Battery and Bell test does not occur during this walk test.
- The test ends once all points are tested or until the test times out in 20 minutes of no activity.
- Local event printing without alarm annunciation or reporting to the central station receiver.
- D1255 command center displays a sequential count after each point is activated and restored as well as the text for the point.
- The D1255 command center displays ALL PNTS TESTED.
- If enabled in Routing, SERVICE START and SERVICE END are reported at the central station receiver for the beginning and end of the test.

Point 128 and Point 248 will appear as missing. This is normal. These points are used for supervising the Zonex bus 1 (PT 128) and Zonex bus 2 (PT 248). However, if the Zonex bus has a fault, these points will indicate a short.

For further information on how to troubleshoot extra point conditions, review the *Point (ZONEX) Bus D7212G Terminals 27 to 28* section in the *D7212G Operation and Installation Guide* (P/N: 43488538544).

L## Default Text

Default: See Program Record Sheet

Selections: (Blank) or E

#34 Default Text, (CMD 57 [COMMAND][5][7]).

Default Text allows the user with this L## to temporarily display the armed state of the area using panel default text, A# AREA # IS ON, A# NOT READY, A# AREA # IS OFF, and A# ACCOUNT IS ON.

L## Change Skeds

Default: See Program Record Sheet

Selections: (Blank) or E

#35 Change Skeds, (CMD 52 [COMMAND][5][2]).

Chg Skeds allows the user with this L## to change skeds that can be edited.



Skeds can be restricted from being edited by programming S## Time Edit? to No.

User Interface

2.11.3.2 Custom Functions

L## C Function 128 [through 131]

Default: See Program Record Sheet

Selections: (Blank) or E

#128 - #131 Enable Custom Function 128 through 131, [MENU FUNCTION only].

Allow a user with this L## to execute the desired Custom Function.

2.11.3.3 Report Levels

L## Force Arm

Default: See Program Record Sheet

Selections: (Blank) or E

Allow a user with this L## to Force Arm.

L## Area O/C

Default: See Program Record Sheet

Selections: (Blank) or E

Allow a user with this L## to generate opening and closing reports if the area to which this authority level is assigned sends opening and closing reports.

L## Restricted O/C

Default: See Program Record Sheet

Selections: (Blank) or E

Allow a user with this L## to initiate an opening report if a bell is ringing or a closing report when force/bypass arming. The area to which this authority level is assigned must be programmed for restricted openings and closings (*see A# Restrictd O/C* page 49.

L## Perimeter O/C

Default: See Program Record Sheet

Selections: (Blank) or E

Allow a user with this L## to report perimeter opening and closing reports if the area to which this authority level is assigned sends perimeter opening and closing reports.

L## Send Duress

Default: See Program Record Sheet

Selections: (Blank) or E

Allow a user with this L## to send a duress report if the area to which this authority level is assigned sends duress. (See also A# Duress Enable in *Area Parameters* on page 41.)

L## Passcode Arm

Default: See Program Record Sheet

Selections: (Blank) or E

Allow a user with this L## to arm an area by entering their passcode, then pressing [ENT].

9000MAIN

User Interface

L## Passcode Disrm

Default: See Program Record Sheet

Selections: (Blank) or E

Allow a user with this L## to disarm an area by entering their passcode, then pressing [ENT].

2.11.3.4 Access Control Levels

L## Security Level

Default: See Program Record Sheet

Selections: M, P, D, or (Blank)

Note: Not available with D7212G. Leave set to default.

L## Disarm Level

Default: See Program Record Sheet

Selections: I, D, or (Blank)

Note: Not available with D7212G. Leave set to default.

Function List

2.12 Function List

The Function List is accessed when the user presses [MENU] (or the key corresponding to Menu on the D1260) while the command center is displaying the idle text. Up to 32 Functions M### Function(s) can be programmed.

Each *CC* #command center address can display a combination of all/each of the 32 menu items. The D1255 will display one menu item at a time whereas the D1260 will display up to two menu items at a time. Enabling the function in the menu list does this by command center address. The function name shown in the *Functions* column on the record sheet appears in command center display in capital letters. For example, WATCH MODE displays for # 6 Watch Mode.

Menu Item

Default: See Program Record Sheet

Selections: 1 - 32

Enter the Menu Item number you are programming. The M## Function will display sequentially in the order they are programmed. (M 1 Function is the first function that will appear in the menu and M 32 Function is the last function that will appear when scrolling through the menu).



A failure to program Menu Item 1 will cause COMMAND DISABLED to appear in the command center display.

M## Function

Default: See Program Record Sheet

Selections: (Blank), 1 – 13, 15-30, 32 – 35, 128 – 131

Enter the function number indicated in the "#" column of the program record sheet and next to the function in Section *Section 2.11 User Interface* on page 58.



Function numbers 128 to 131 are custom functions and will display the text programmed for CF ### Text.



Application Note

There is no restriction on how many times you may assign a specific function to the menu. By doing so, you can assign the same function at different command centers so they appear differently in some areas than they would in others.

M## CC Address 1 [through 8]

Default: See Program Record Sheet

Selections: Yes or No

Programming this prompt determines at which *CC* address setting this *Menu Item* will appear.

Yes	This menu item will appear at this command center address.
No	This menu item will not appear at this command center address.

2.13 Relay Parameters

Relays provide dry contact (normally open/closed) outputs for LED annunciation and other applications as well as wet (12 VDC on/off) voltage outputs for basic alarm system functions (such as Bell Output, Reset Sensors, etc.). The applications are endless, but primarily, relays are used to enhance a system's capability to perform output functions.

- Panel Wide Relays
- These relays are used to provide an output related to a "panel wide" indication. For annunciation, these
 relays can be used to indicate "system wide" troubles for power, phone and overall panel summary of
 alarms, troubles and supervisory conditions.
- Area Relays
- These relays are used to provide an output "by the area" that the relay is assigned to. An area can have its own bell and sensor reset indications. Relays can also be used to indicate the area armed state and whether any off normal conditions such as a force arm have occurred.
- On Board Relays
- There are 3 on board 12 VDC voltage-outputs which provide power when activated on the panel. These outputs are default programmed from the factory as Relays A, B and C. Typically, Relay A (Terminal 6) is used for the Bell, Relay B (Terminal 7) is used for an alternate alarm output (such as another bell) and Relay C (Terminal 8) is used for Sensor Reset. (Relay B and C require the optional D136 Relays).
- Off Board Relays
- The D7212G can also control 24 dry contact form "C" relays when up to three optional D8129 OctoRelay Modules are installed. These relays are used for Area Relay, Panel Wide Relay, and Individual Point Fault Relays.
- Relay Follows Point
- Relays can also be used to activate when a point programmed for, *P## RlyResp Type* (in *Section 4.1 Point Index* on page 87), is off normal or in alarm condition.
- Relay Reports
- When relay activity is reported to the receiver (see *Phone Routing*), on-board relays are reported as follows: A = 253, B = 254, C = 255, and others report as 001 to 024. The relay report is RELAY SET RELAY # rrr when the relay is turned ON and RELAY RESET RELAY # rrr when the relay is turned off. Relay reports are also printed on the local printer and stored in the panel memory log.
- Controlling Relays
- As mentioned, relays can be activated depending upon conditions that exist with the panel. In addition, relays can be controlled by the user using the Chg Relay? function, Relay On/Relay Off skeds, and the Remote Account Manager.

The following programming tips, notes and applications are important for you to review prior to programming your relays.



DO NOT attempt to use the CHG RELAYS? function to toggle relays reserved for special functions. Special function relays are Area and Panel Wide relay functions as well as relays assigned to CC Entr Key Rly and P## RlyResp Type?.



Relay C is always powered ON. Assigning any other relay (1 - 24, A or B) deactivates Relay C so this output can be used for other functions. When Relay C is programmed for A# Rest Sensors, power is always supplied from Terminal 8 of the panel.



Check relay status after reprogramming or resetting the panel. All relays are turned off after the panel is reset. The panel checks certain relay functions each minute and will resume the correct state after the reset. Other relays must be manually set to the correct state using the Change Relay function (CMD 54).

These relay functions resume the proper state within 1 minute:

Alarm BellFire BellArea FaultPerimeter FaultAC FailBattery TroubleSummary FireSummary AlarmSummary Fire TblSummary TroublePhone FailCommunications Fail

Area Armed Silent Alarm Watch Mode
Reset Sensors Summary SupBurg Summary SupFire

These relay functions need to be manually reset with Change Relay function (CMD 54):

Fail To Close Force Armed
Duress Log % Full

2.13.1 Area Relays

Each area can be assigned a unique relay number for each of the events listed in this section.

Area

Default: 1 Selections: 1 - 4

Enter the area number you are programming.



The D7212G allows up to only four areas. Although the D5200 allows entries for Areas 5 through 8, they are not applicable for use on the D7212G.

If Areas 5 through 8 are inadvertently programmed on the D7212G, the command center will display CALL FOR SERVICE.

A# Alarm Bell

Default: A

Selections: (Blank), 1 - 24, A, B, or C

This *voltage output* relay activates and provides 12 VDC output when a <u>non-fire point</u> (*P## Fire* is No) assigned to this area goes into alarm.



Burg Time and Burg Pat must be programmed in Bell Parameters. This relay activates according to the bell pattern and remains active until the bell time expires. P## Silent Bell must be No in order for the bell to ring upon alarm.

A# Fire Bell

Default: A

Selections: (Blank), 1 – 24, A, B, or C

This *voltage output* relay activates and provides 12vdc output when a <u>fire point</u> (*P## Fire* is Yes) assigned to this area goes into alarm.



Fire Time and Fire Pat must be programmed in Bell Parameters. This relay activates according to the bell pattern and remains active until the bell time expires. P## Silent Bell must be No in order for the bell to ring upon alarm.



Although Relay C is a valid entry for A# Fire Bell, Bosch Security Systems recommends that Relay C is not programmed for this entry.

A# Reset Sensors

Default: C

Selections: (Blank), 1 - 24, A, B, or C

Unlike the default relay for Alarm Bell and Fire Bell, this voltage-output relay (*relay C*) de-activates for <u>5 seconds</u> when the **Reset Sensors**? function is initiated from the command center or during a **Fire Walk**? test.



The Reset Sensor time will convert from the 5 second default time to the time programmed in A# Verify Time (Section Error! Not a valid result for table. Area Parameters on page 38) when a point programmed for P## Alarm Verify (Section 4.1 Point Index on page 87) goes into an alarm condition.



When sharing one relay to reset sensors in two or more areas you must program the following. Failure to do so will cause TROUBLE PT ### for all point types programmed as P## Resettable.

- CC Scope must include all the areas that are sharing the relay.
- L## Reset Sensors for the user initiating the sensor reset must be enabled in all the areas that are sharing the relay.
- A# Verify Time must be the same number of seconds for all the areas that are sharing the relay.

A# Fail To Close

Default: (Blank)

Selections: (Blank), 1 – 24, A, B, or C

This relay activates when the closing window expires for the specified area. It remains activated until midnight, or until another closing window starts, or the panel is reset, whichever occurs first.

Note: See programming 5 for additional relay function.

A# Force Armed

Default: (Blank)

Selections: (Blank), 1 - 24, A, B, or C

This relay activates when this area is Force Armed. It remains activated until the area is disarmed or the panel is reset.

Note: When Perimeter force arming this relay does not activate.

A# Watch Mode

Default: (Blank)

Selections: (Blank), 1 – 24, A, B, or C

This relay activates when a controlled point that is programmed for *P## Watch Point* is tripped in the specified area while the area is in Watch Mode and the point is not armed. It remains activated for 2 seconds after each point is faulted.

A# Area Armed

Default: (Blank)

Selections: (Blank), 1 – 24, A, B, or C

The relay activates when the specified area becomes master armed (exit delay must expire before the relay activates). The relay remains activated until the area is disarmed, it will not deactivate during the entry delay time.

If multiple areas use the same relay, the relay activates when all areas are armed. It deactivates when the first area disarms.



Programming a 64 in Area 8's Silent Alarm Relay will cause the Area Armed relay to energize at the <u>beginning</u> of the exit delay time.



Keyswitch area armed status with LED's. Use a D8129 module and connect an LED to display the armed state.

Alternate communication trigger: This output relay can be used to trigger the input zone of a device being used as a slave to report panel arming status.

A# Area Fault

Default: (Blank)

Selections: (Blank), 1 – 24, A, B, or C

The relay activates whenever a *controlled (P## Type 1, 2, 3, only)* perimeter or interior point is faulted. The relay remains activated until all perimeter and interior points in the area are normal.



Application Note

Keyswitch area armed status with LED's. Use a D8129 module and connect an LED to illuminate when this relay is activated indicating that the area is not ready to arm.

A# Duress Relay

Default: (Blank)

Selections: (Blank), 1 - 24, A, B, or C

The relay activates when a duress alarm is generated from a command center assigned to the specified area.



Burg Time must have a bell period programmed and A# Duress Enable must be Yes. This relay activates "steady" regardless of bell pattern and remains active until the bell time expires.

A# Perim Fault

Default: (Blank)

Selections: (Blank), 1 - 24, A, B, or C

The relay activates when a controlled perimeter point (*P## Type 1*) assigned to the specified area is faulted. This relay activates regardless of the areas armed state. This relay provides a steady output until all perimeter points in the area return to normal.



This relay does not activate on interior faults. To detect all area point faults, program all points as perimeter points in the area to which this relay is assigned.

A# Silent Alarm

Default: (Blank)

Selections: (Blank), 1 - 24, A, B, or C

This relay activates when a point assigned to the specified area and programmed for *P## Silent Bell* goes into alarm.



Tip #1:

Burg Time must have a bell period programmed. This relay activates according to the bell pattern and remains active until the bell time expires or a valid passcode is entered.



Tip #2:

Programming a non-zero value in Area 5's Silent Alarm Relay will enable Ground Fault Detect on D7212G Control/Communicators. In addition, please refer to the D7212G Operation and Installation Guide (P/N: 4998138544) regarding Ground Fault Detect.



Tip #3:

Perimeter Armed Relay

This feature, when enabled, turns the "Fail to Close" relay function into a "Perimeter Armed" relay function.

• To switch the Fail to Close relay into a Perimeter Armed relay function, program a 63 in Area 7's Silent Alarm Relay entry. Then, program a relay number (1-24) into the appropriate area that you wish to have activated when the area becomes Perimeter Armed (CMD 2, CMD 3, or CMD 8). See also Programming Tip #2 for additional information.

2.13.2 Panel Wide Relays

The following eleven relay options will activate when they occur anywhere in the panel. They are not restricted by area boundaries.

AC Failure

Default: (Blank)

Selections: (Blank), 1 - 24, A, B, or C

This relay activates when the panel responds to an AC power failure as programmed in AC Fail Time in Section 2.5 Power Supervision on page 28. This relay automatically resets when AC power is restored.



Application Note Use this relay as an option to create audible annunciation using the command centers for all applications excluding commercial fire systems.

Battery Trouble

Default: (Blank)

Selections: (Blank), 1 – 24, A, B, or C

This relay activates when battery voltage falls below 85% of capacity (12.1 VDC) for a fully charged (13.8 VDC) battery, or when the battery is in a missing condition. This relay automatically resets when battery power is restored.



Use this relay as an option to create audible annunciation using the command centers for all applications excluding commercial fire systems.

Phone Fail

Default: (Blank)

Selections: (Blank), 1 – 24, A, B, or C

This relay activates when a telephone line failure occurs. A time must be entered in *Ph Supv Time* (see Section 2.2 Phone Parameters on page 12) in order for this relay to activate. This relay automatically resets upon restoral of the phone line(s).

Comm Fail

Default: (Blank)

Selections: (Blank), 1 – 24, A, B, or C

This relay activates when a panel is unable to communicate a report after 10 attempts are made to each *Routing* destination. At the same time, COMM FAIL RT ## will display at the command center. This relay automatically resets when a report is sent successfully.



Use this relay to report primary digital report failure to an alternate communication device.

Log % Full

Default: (Blank)

Selections: (Blank), 1 – 24, A, B, or C

Enter the number of the relay that activates when the log has reached the programmed percentage of its capacity as programmed in *RAM Parameters* program item *Log* % *Full*. This relay provides a steady output until a "Get Log and Set Pointer" is performed from the RAM IV.

Summary Fire

Default: (Blank)

Selections: (Blank), 1 - 24, A, B, or C

Enter the number of the relay that activates when any fire point in the system (*P## Type 0, P## Fire* Yes) goes into alarm. This relay provides a steady output until all fire points in the system are returned to normal.

Summary Alarm

Default: (Blank)

Selections: (Blank), 1 - 24, A, B, or C

Enter the number of the relay that activates when a non-fire point goes into alarm. This relay provides a steady output until the alarm is acknowledged by a valid passcode then cleared from alarm memory with an acknowledgment at the command center.



This relay will not activate for silent alarms.

Summary Fire Tbl

Default: (Blank)

Selections: (Blank), 1 – 24, A, B, or C

This relay activates when any fire point in the panel is in trouble. This relay provides a steady output until all fire points have restored to a normal condition. If a Fire Supervision point is missing, this relay will be activated.

9000MAIN

Relay Parameters

Summary SupFire

Default: (Blank)

Selections: (Blank), 1 – 24, A, B, or C

This relay activates when any *Fire Supervisory* point in the panel is in a supervisory condition (off normal). This relay provides a steady output until all fire supervisory points are restored to a normal condition.

Summary Trouble

Default: (Blank)

Selections: (Blank), 1 - 24, A, B, or C

This relay activates when any non-fire point in the panel is in a trouble condition. This relay provides a steady output until the user at the command center acknowledges the trouble.

Summary SupBurg

Default: (Blank)

Selections: (Blank), 1 – 24, A, B, or C

This relay activates when any *Non-Fire Supervisory* point in the panel is in a supervisory condition. This relay provides a steady output until it is acknowledged at the command center. If a Supervisory Burg point is missing, this relay will be activated.

Passcode Worksheet

3.0 RADXUSR1

3.1 Passcode Worksheet

This section of programming items assigns user groups 001 to 099 a passcode, area assignment by authority level and a user group window.

3.1.1 User Groups

For the D7212G there are 99 groups consisting of one user with a passcode, user group window, and authority level assignment for each area. Although the D5200 allows entries for Areas 5 through 8 for authority levels, they are not valid with the D7212G. In addition, although tokens and sub-users may be added when using the D5200, they too are not valid with the D7212G Control/Communicator.

3.1.2 Passcodes

The passcode can be from three to six digits. Entering three digits in the *User ###* chooses the Master user. Programming the *U### Passcode* assigns a passcode to the Master User.

3.1.3 User Group Window

U### User Group can be used to enable/disable the *U### Passcode* for up to eight different time periods throughout the day. This is done by assigning the number (1-8) programmed in *U### User Group* to a *W# User Window #*. If the user is outside a window, COMMAND DISABLED will appear on the command center after the user enters the passcode and presses [ENT].

3.1.4 Authority Level by Area

A user group is assigned an authority level of 1 through 14 for each area using the *U### Area # Auth* prompt. The authority level can be different for each area. Not programming an authority level for an area will be indicated by the NOT AUTHORIZED display on the command center.



When using the ADD/CHANGE USER function at the command center, the authority levels and the changes that have been made affect the Master User's passcode.

3.1.5 User Name

Each user group can be assigned one *U### Name*. This name is logged and reported to the central station.

Note:

When using a D1260 Command Center, User 099 text is used for Contact Information text (e.g., telephone numbers). If a D1260 is installed on the system, Bosch Security Systems recommends not using User 099 for User ID information.

Passcode Worksheet

3.1.6 Reporting and Logging

Modem Format must be **Yes** for the following reports to the central station. Regardless of the reporting format, they will log and print *locally* at the local printer as shown.

The following is an example for User 122 as it would appear.

Master User:

ID 122. (when using passcode)



In reporting systems using Modem format, all three digits of the User ID Code are transmitted to the central station with appropriate reports. Central station automation computer systems may only accept Zonex and COMEX style User IDs, see Point/User Flag in Section 2.1 Phone on page 11.

In BFSK, only one number is transmitted. This number represents a group of 10 users as shown in the table below.

| User |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Code 000 | Code 010 | Code 020 | Code 030 | Code 040 | Code 050 | Code 060 | Code 070 | Code 080 | Code 090 |
| - 009 | - 019 | - 029 | - 039 | - 049 | - 059 | - 069 | - 079 | - 089 | - 099 |
| BFSK |
| Report |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

Table 29: BFSK Report per User Code

User

Default: 001

Selections: 000 or 001 – 099

Enter the User number you are programming.



User 000 is the Service Authority Level (Level 15). You can not change the programming for user 000.

Only the Service Authority Level (User 000) can delete User 000. When a user other than User 000 tries to delete the passcode for User 000, the command center displays NOT IN USE.

User 000 cannot be added/changed from the command center whether it exists or not.

U### Passcode

Default: See *Program Record Sheet*Selections: Three to six digits (0 - 9)

Enter from three to six digits to enable a passcode for the Master User in this group.



User I.D.000 is the Service Passcode. The default Service Passcode is 123.

The programmer does not allow you to enter any passcode number that could conflict with a duress passcode. If Duress Type is a 1, passcodes within a range of 1 for existing passcodes can not be entered. This rule applies even if duress is disabled. For example, once a passcode of 654321 is entered, 654322, 654323, 654320, and 654329 can not be entered.



A "silence bell" authority is built into all authority levels, even if they are default and none of the available programmable functions are enabled. A user passcode can silence a Fire/Burg bell as long as "any" authority level is assigned to the area where the bell can be silenced.

Passcode Worksheet

U### User Group

Default: (Blank) Selections: (Blank), 1 – 8

Use this parameter to create a group of up to 099 users whose combinations can be enabled/disabled using an automatic user window. This is the number that will be entered into the *W# User Group* for any active *W# User Window*. Multiple windows can be programmed for one user group (up to eight) within one 24-hour period. For example, if User Group 1 has a window running from 8:00 AM (start time) to 4:00 PM (stop time), the users for that group may use their passcodes only between that time. Furthermore, between 4:00 PM that day and 8:00 AM the next day, the users may not use their passcodes.



To enable this user's passcode at all times, leave this item blank.

User Group Window times cannot be changed from the command center. Once a window is assigned to a user group, the users in that group rely on the window to be active (within the start and stop times) for their passcodes to function. The only way to disable the window is through reprogramming the panel from the D5200 or RAM.

U### Area 1 [through Area 4] Auth

Default: See Program Record Sheet

Selections: 1 - 14, or (Blank)

Assign an authority level to the user for this area.

(Blank) means the user has no authority in this area.

U### Name

Default: See *Program Record Sheet*Selections: 16 Alphanumeric characters

Enter Alphabetic-characters A-Z in Capital Letters

Period (.), comma (,), percent (%), parentheses [()], equal (=), greater/less than (<>), exclamation (!), braces ({}), apostrophe ('), carat (^), grave accent (^), tilde (~), semi-colon (;), and colon (:) are not allowed.

Enter up to sixteen characters of text for this user.

U### Mstr Site

Default: (Blank)

Selections: 000=(0) - 254, or (Blank) (255)

Note: Not available in D7212G. Leave set to default.

U### Mstr C/D

Default: (Blank)

Selections: 00000=(0) - 65534, or (Blank) (65535)

Note: Not available in D7212G. Leave set to default.

U### SU1 through SU3 Site

Default: (Blank)

Selections: 000=(0) - 254, or (Blank) (255)

Note: Not available in D7212G. Leave set to default.

RADXUSR1

Passcode Worksheet

U### SU1 through SU3 C/D

Default: (Blank)

Selections: 00000=(0) - 65534, or (Blank) (65535)

Note: Not available in D7212G. Leave set to default.

4.0 RADXPNTS

4.1 Point Index

Use this programming module to construct "personality types" for points used in the system. The Index numbers are used in "Point Assignments." Each unique Point Index number determines the panel's responses to specific conditions occurring on the protective points.

The NEW RECORD program contains default entries and descriptions that match RAM IV defaults for Point Indexes. See the *D7212G Program Record Sheet* (P/N: 4998138542) for defaults.

Point Index

Default: 1 **Selections:** 1 – 31

The number of the point personality you are about to program. You can define up to 31 individual personalities.

P## Type

Default: See Program Record Sheet

Selections: 0-9

This entry defines the "Point Type." Following are definitions for each type of point.

0	24-Hour – A 24-Hour point is not turned on and off from a command center. 24-Hour points are armed all the time, and can be used for fire protection (see <i>Fire Point</i>), panic, medical, and police alerts.
	24-Hour points can be programmed as bypassable; however, the application should be carefully considered before using the bypassable option. Bypassable 24-Hour points should be programmed to Buzz on Fault.
	When a 24-Hour point is bypassed, the report should be sent as it occurs. If the area contains all 24-Hour points, the area is never armed or disarmed; therefore, a deferred bypass report is not sent.
	24-hour protection for fire doors, roof hatches , etc. Instead of programming this type of protection as a 24-Hour point, consider using a perimeter point type with a Point Response of 9 to E. 24-Hour points do not show faults when an arming function is entered, but perimeter points do. When programming for this type of protection, you may also want to consider using the Buzz on Fault and Local While Disarmed options.
1	Perimeter – Perimeter points are armed with all arming functions. Points programmed as perimeter can also be armed as a group (using perimeter-arming functions) separately from points programmed as interior. This lets the user partially arm the system to establish perimeter protection and still occupy the interior of the protected premises. Perimeter points can be programmed to initiate entry delay time. If the point initiates entry delay, it can also initiate an entry tone.
	When a Perimeter Point is programmed for entry delay, entry delay time is always provided. If the area is in entry delay when a second Perimeter Point trips, the panel compares the remaining entry delay time to the time programmed for the second Perimeter Point. If the second Perimeter Point's entry delay time is less than the remaining time, it shortens the entry delay time.
	Perimeter Points programmed for an instant <i>Point Response</i> , generate an alarm immediately when tripped, even during entry or exit delay.
	TI 11 00 D : 1 TI

Table 30: Point Types

2	when using pe	erior points are armed only by master arming the area. They are NOT armed erimeter-arming functions. These points are typically used to monitor ion devices such as interior doors, motion detectors, photoelectric beams, tc.								
	(see <i>Point Res</i>	rior Points. Interior points are usually programmed for an instant alarm <i>ponse</i>). Points programmed for instant alarms generate alarms immediately, ntry or exit delay.								
	"Delayed" Int Response. A de	erior Points. Interior Points can be programmed for a delayed <i>Point</i> elayed response means that if the point is tripped while the area is armed, it delay. It does not generate an alarm until entry delay expires.								
	provided. If the remaining ent Point's entry o	rior Point is programmed for entry delay, entry delay time is always the area is in entry delay when the Interior Point trips, the panel compares the ry delay time to the time programmed for the Interior Point. If the Interior delay time is less than the remaining time, it shortens the entry delay time.								
	Off).	s can also initiate an entry tone at the command center (see <i>P## Entry Tone</i>								
	In some cases,	you may need to create an interior point that causes an instant alarm <i>only if tection is not tripped first.</i> Use Interior Follower to create this type of								
3		Interior Follower – Interior Follower points are armed only by master arming the area. They are NOT armed when using perimeter-arming functions.								
	An Interior Fo	An Interior Follower point does not create an alarm if it trips while the area is in entry delay. An Interior Follower does not change the amount of remaining entry delay time.								
	You must pro	If no entry delay is in effect when the Interior Follower trips, it creates an instant alarm. You must program a delayed <i>Point Response</i> (4, 5, 6, 7, or 8) for an Interior Follower point. The panel ignores the entry in <i>P## Entry Delay</i> for an Interior Follower point.								
	prevent Interior Perimeter dela	necessary to increase the <i>Debounce</i> count for Interior Follower points to Follower points from going into alarm before the panel recognizes that a oint has been faulted. Program the Interior Follower's <i>Debounce</i> for one lan the debounce count on Perimeter delay points.								
4		intained – Program <i>Point Response</i> as 1. Do not connect initiating devices to								
	Normal	The area is disarmed.								
	Open	When this point changes from normal to open, the area arms.								
	Short	A short is a trouble while the area is disarmed. A short is an alarm while the area is armed. When this point changes from shorted to normal or open, it restores.								
	10	·								
		n <i>Point Response</i> as 2, the point will respond as follows:								
	Normal	When this point changes from open to normal, the area arms.								
	Open	The area is disarmed.								
	Short	A short is a trouble while the area is disarmed. A short is an								
		alarm while the area is armed. When this point changes from shorted to normal or open, it restores.								
		shorted to normal or open, it restores.								
		destoral reports are not sent if <i>Local While Disarmed</i> is Yes.								
	Alarm and Re	storal reports are not sent if <i>Local While Armed</i> is Yes .								

Table 30 (cont.): Point Types

5		entary – Used for Area Arming and Disarming. <i>Point Response</i> must be Do not connect initiating devices to a Keyswitch point.								
	N->S->N	When this point momentarily changes from normal to shorted								
		to normal, it toggles the armed state of the area.								
	Open	An open is a trouble while the point is disarmed. An open is an								
		alarm while the point is armed.								
		When this point changes from open to normal, it restores.								
	Trouble and Res	toral reports are not sent if <i>Local Disarmed</i> is Yes.								
6		nt – Used for Point Arming and Disarming. <i>Point Response</i> must be								
		Local bells are silenced through the command center.								
	Normal	The point is armed and sends a POINT CLOSING. A POINT								
		CLOSING is not sent if <i>Local Armed</i> is YES.								
	Open	An open is an alarm while the point is armed. An open is a								
		trouble while the point is disarmed. ALARM and RESTORAL								
		reports are not sent if <i>Local Disarmed</i> is YES.								
	Short	The point is disarmed and sends a POINT OPENING. A								
		POINT OPENING is not sent if <i>Local Armed</i> is YES.								
7	D970 (O/C N									
,	of the area arm s Point Response r	-Priority) – The D279 provides point arming and disarming independent tate. A <i>non-priority</i> D279 point arm state does not affect area arm state. nust be programmed 1. Local bells are silenced through the command ontrol at the D279, use <i>P## Type</i> 8.								
	reports. If the Da	Cut the W1 jumper on the D279 to send POINT OPENING and POINT CLOSING reports. If the D279's W1 jumper is NOT cut then no open or close report is sent,								
		regardless of panel programming.								
	Normal	The point is armed and sends a POINT CLOSING. POINT								
		CLOSING is not sent if <i>Local Armed</i> is YES.								
	Open	The point is disarmed and sends a POINT OPENING. A								
		POINT OPENING is not sent if <i>Local Armed</i> is YES.								
	Short	A short is an alarm when the point is armed. A short is a trouble								
		when the point is disarmed. ALARM and RESTORAL reports								
		are not sent if <i>Local Disarmed</i> is YES.								
8		rity) – The D279 provides point arming and disarming independent of the <i>priority</i> D279 point must be armed before an area can be armed. Program s 2.								
	-	per on the D279 to send area opening and closing reports as programmed								
	in Area Paramet	ers and to provide bell control. If the D279's W1 jumper is NOT cut then								
		area close report is sent, and alarm bells can only be silenced from a r, no matter how the panel is programmed.								
	Normal	When this point changes from open to normal, the area arms.								
	Open	The area is disarmed. The alarm bell silences if an alarm had								
		occurred while the area was armed.								
	Short	A short is a trouble while the area is disarmed. A short is an								
		alarm while the area is armed. When this point changes from								
		shorted to normal or open, it restores.								
9	is Master Armed the Easikey read	oint is programmed for access. Program <i>Point Response</i> as 1. If the system or Perimeter Armed (with or without delays), presenting a valid token to er shorts the point and disarms its assigned area. Presenting a valid token the will not clear trouble or alarm memory or rearm the area.								

Table 30 (cont.): Point Types

4.1.1 Point Responses



Applications for Point Responses 9, D, and E

You can combine Point Responses 9, D and E with perimeter Point Types to create more flexible 24-hour protection. Unlike 24-hour points, a faulted perimeter point with a point Response of D and E displays at the command center when arming. Like a 24-hour point, a point programmed this way can generate alarms whether the area is armed or disarmed.

Combining Point Response 9 with the Local While Disarmed feature provides off-site reporting when the area is armed, but only local alarm annunciation when the area is disarmed.

Combining Point Response 9 with the Local While Armed feature provides off-site reporting when the area is disarmed, but only local alarm annunciation when the area is armed.

<u>Point Response E</u> *Use this for Zonex/Asic motion detectors. This will allow the panel to report troubles while master armed.*



Point Response F will not sound at local command centers but will activate RlyResp Type 1 and command center faults. To annunciate the off-normal state at a command center, program Disp as Dvc as Yes and/or BuzzOn Fault as 1 or 2. This point response will not generate alarms or activate alarm relay.

Point Response 8, 9, A, B, and C provide supervisory (24 hour) reporting.

Characteristics of a Fire point

Reporting: When a group of events occur, the panel will route and print out fire reports first.

Visual Annunciation: Fire Troubles will continue to scroll until the trouble is cleared. Once

acknowledged, a FIRE TROUBLE scroll will let the end user know that a fire point, or group of Fire points, is still in trouble. Panel Wide Relays Summary Fire and Summary Fire Tbl will activate if a relay is assigned when any fire

point goes into alarm or is in trouble.

Audible Annunciation: A Fire point activates the A# Fire Bell relay programmed in Relay

parameters. The amount of time and pattern of the relay activation is programmed by area in Bell parameters A# Fire Time and A# Fire pat.

Supervisory: A Fire point can send a FIRE SUPERVISORY report and activate the

Summary Fire Sup and Summary Fire Tbl panel wide relays with a P##

Response of 8-9-A-B-C.

Alarm Verification: A Fire point can delay an alarm by the time programmed in A# Verify Time

in the Area parameters. Combined with A# Resettable, a fire point will also

reset the electrical circuit for the amount of verify time.

Reset Sensor: A fire device that requires resetting can be manually reset using the reset

sensor relay for the area it is assigned to.

Fire Walk: Use the Fire Walk function to test fire points in the system.

To provide an audible tone for a Fire Supervisory point that has been restored, use P## RlyResp Type 1 and connect to a graphic annunciator.

P## Pt Response

Default: See Program Record Sheet

Selections: 0 - F

Point Response defines the "Point Response to Opens and Shorts" for this point. The Point Response tables show each selection available for controlled (non-24-Hour) point types and 24-Hour point types.

CONTROL	LED (NO	N-	24-1	HO	UR)	PC	IN'	TS										Example: Point Type = 1 and
Pt Response		0	1	2	3	4	5	6	7	8	9	A	В	C	D	E	F	Point Response = 8.
Armed	Open	I	I	I	I	D	D	I	I	D	I	I	I	I	I	Т		Perimeter point with delayed
Armed	Short	I	I	I	I	I	I	D	D	D	I	I	I	I	I	I		alarm response when armed
Disarmed	Open		Т		Т				Т		I	I	Т	I		Т		(opened or shorted) and no
Disarmed	Short			Т	Т		Т				I	Т	I		I			response when disarmed.

Table 31: P## Pt Response - Controlled Points

24-HOUR POINT	S																Example: Point Type = 0 and
Pt Response	0	1	2	3	4	5	6	7	8	9	Α	В	C	D	E	F	Point Response = 8.
Open	I	Т	I	Т			Ι	Τ	S	Τ	S		S				24-Hour point with supervisory
Short	I	I	Т	Т	I	Т			Т	S		S	S				response when open and a
																	trouble response when shorted.
Table Key: I = Instant Alarm, D = Delayed Alarm, T = Trouble, S = Supervisory, (Blank) = audible/visual response.																	

Table 32: P## Pt Response – 24-Hour Points



When programming the Point Response for Inovonics Wireless Transmitters, remember that regardless of how the transmitter is programmed, the D8125INV Wireless Interface always sends the off-normal state to the control panel as a short and a tamper condition as an open. As a result, <u>typical</u> Point Responses for the Inovonics transmitters would include 0, 1, 6, 7, and E for Controlled points and 0 and 1 for 24-hour burg points. When programming a transmitter as a fire point, a Point Response of 1 is recommended.

Note: Wireless transmitters are NOT UL Listed with the D7212G in fire or burglary applications. At present, Inovonics Wireless Transmitters, when used with the D8125INV Wireless Interface on a D7212G panel, are not UL Listed to be used for fire or burglary applications.



With Supervisory Pt Response (S = Supervisory), please note that BFSK format does not transmit fire supervisory or non-fire supervisory events. Therefore, Modem Format must be used with Supervisory Pt Responses.

P## Entry Delay

Default: See Program Record Sheet

Selections: 5 – 600 seconds

Use this option to enter the amount of entry delay time that a user will have after faulting a controlled point (*P## Type 1*, *2, 3*) with a delayed response (D) (*P## Pt Response*) of 4-5-6-7 or 8. The D1255 will alternate between DISARM NOW and the point text of the point that caused the area to go into entry delay.

If this time is allowed to expire before disarming or if the point is faulted to an instant response (I) an alarm will occur.



Make entries in 5 second increments. The programmer does not allow off-increment entries.

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If another perimeter or interior follower delay point trips while the area is already in entry delay, the panel will adjust the delay time to the delay point with the least amount of delay time.

Use P## Type 3 Interior Follower to program points that will not go into instant alarm that the user must fault in order to get to the command center and disarm during the entry or exit delay period.

P## Ent Tone Off

Default: No Selections: Yes or No

This option enables/disables the entry delay warning tone for this point.

Yes	Disable entry delay tone when this point is faulted to the delay response.
No	A tone sounds at command centers when this point initiates entry delay.



Do not set to No on points actually being used to notify the user to disarm the system. The possibility of false alarms increases if the entry delay warning is not used.



Entry Tone can also be turned off when programming your CC Entry Tone, in Section Error! Not a valid result for table. Command Center on page 50, which allows you to manage the tone by command center.



You may want to disable the entry tone in high security applications where you do not want to annunciate entry delay.

P## Silent Bell

Default: See Program Record Sheet

Selections: Yes or No

Yes	Activate the <i>Silent Alarm</i> relay when this point goes into alarm. Command centers do not sound the alarm tone for non-fire points.
No	Activate either the <i>Fire Bell relay</i> or <i>Alarm Bell</i> relay and sound the alarm tone at command centers when this point goes into alarm. If this is a Fire Point it activates the <i>Fire Bell</i> relay programmed in <i>Relay Parameters</i> , otherwise, it activates the <i>Alarm Bell</i> relay. The amount of time and pattern of the relay activation is programmed by area in <i>Bell Parameters</i> .



If you want this point to eventually ring the bell because the message failed to reach the central station receiver, program P## Audible After 2 Failures as Yes.

P## Ring Til Rst

Default:

No

Selections:

Yes or No

Use this option to determine if the bell will continue to ring until the *Fire Bell* time expires. The point is returned to a normal condition when the user can acknowledge the alarm to silence the bell.

Yes	The relay programmed to provide fire alarm output for this point cannot be de-activated until the point restores to normal.
No	The relay programmed to provide fire alarm output for this point can be de-activated before the point restores to normal.

Note:

If the point restores and the fire alarm is not silenced from the command center, the fire alarm output continues until Fire Bell time expires. If the point does not restore, the fire alarm output continues even after bell time expires.



Use this option for fire applications to meet the requirement that audible alarms cannot be silenced until the fault condition clears or the Fire Bell time expires.

P## Audible After 2 Failures

Default:

No

Selections: Yes or No

Use this option for <u>reporting</u> non-fire points programmed as *P## Silent* to eventually cause the alarm bell to ring *if the* panel fails to report the alarm event at the end of two failed attempts to the remote central station receiver.

Yes	A# Burg Alarm relay will activate after two failed attempts.
No	P## Silent points will not cause the A# Burg Alarm relay to activate even if the report does
	not get to the central station receiver.



When a point that is programmed for P## Silent Bell is faulted, the timer for the A# Burg Time starts, even though the bell is not yet ringing. It could take up to 3 minutes before the second attempt has failed. Because of this, ensure A# Burg Time is programmed to provide the amount of bell time you would like, minus the 3 minutes it may take before the bell actually begins to ring.

P## Invisible Pt

Default: See Program Record Sheet

Selections: Yes or No

Use this option to determine whether the point will appear in the command center display upon an alarm condition. For LED command centers, the LED will not illuminate upon an alarm condition. Point text will appear and annunciation will be made for invisible points that are programmed for a trouble condition in point response.

Yes	Command centers do not display alarm activity from this point.
No	Activity from this point is visible at the command centers.



To prevent the command center alarm tone and the A# Burg Alarm bell from sounding, this point must have P## Silence Bell as Yes.



ALARM SILENCED will display at the command center if this invisible point causes a bell to ring upon an alarm and a valid passcode is entered.

P## BuzzOn Fault

Default: (Blank) Selections: (Blank), 1 - 3

Use this option to generate a Buzz on Fault even if the point is not actually in a trouble condition. If a point is programmed with a Point Response that generates an alarm or trouble condition, it will have priority over the BuzzOnFault option.

	Operation for Controlled Points	Operation for 24-hour Points
	(Point Types 1, 2, and 3)	(Point Type 0)
(Blank)	The point will only generate a buzz at the command center if it goes into the trouble condition indicated in the <i>P## Point Response</i> .	Same
1	The point will generate a <u>buzz until restore</u> at the command center for <i>any fault condition</i> while the point is <i>disarmed</i> . The buzz will continue until the point restores <u>and</u> the user acknowledges the condition using a passcode or CMD 4. The point must be normal before the user can silence the buzz.	The point will generate a <u>buzz until restore</u> at the command center for <i>any fault condition regardless of the armed state</i> . The buzz will continue until the point restores <u>and</u> the user acknowledges the condition using a passcode or CMD 4. The point must be normal before the user can silence the buzz.
2	The point will generate a buzz at the command center for <i>any fault condition</i> while the point is <i>disarmed</i> . The point does not have to be normal before the user can silence the buzz.	The point will generate a buzz at the command center for <i>any fault condition regardless of the armed state</i> . The point does not have to be normal before the user can silence the buzz.
3	The point will generate a buzz at the command center for any fault condition while the area is disarmed. The user cannot silence this buzz, but it silences automatically when the point is restored. If the fault condition results in a trouble response, then the command center will continue to buzz even after the user acknowledges the condition if the fault is still present.	The point will generate a buzz at the command center for any fault condition regardless of the armed state. The user cannot silence this buzz, but it silences automatically when the point is restored. If the fault condition results in a trouble response, then the command center will continue to buzz even after the user acknowledges the condition if the fault is still present.



The buzz does not automatically stop once the point is restored when using Option 1 or 2. The user must acknowledge the buzz prior to the buzz stopping. However, when using Option 3, the buzz will automatically stop when the point restores to normal without user intervention.



Points that have been bypassed (by the user, Sked, Swinger Bypass, or RAM) will NOT generate a Buzz On Fault condition at the command center.

P## Watch Point

Default: See Program Record Sheet

Selections: Yes or No

Use this option to allow a controlled point to generate a watch tone as long as the area is disarmed and not being faulted into a trouble or alarm condition.

Yes	This point activates Watch Mode responses if it is faulted while the panel is in Watch Mode.
No	Do not activate Watch Mode responses for this point.

P## RlyResp Type

Default: See Program Record Sheet

Selections: (Blank), 1 - 2

Use this option to cause a relay (1-24) to respond when a *corresponding* point with the same number (1-24) is faulted. (This requires connecting D8129 OctoRelays to Zonex Bus 1. See address settings on the back of the *D7212G Program Record Sheet* [P/N: 4998138542]).

(Blank)	Point state will not affect the operation of the corresponding relay.
1	Relay Follow Point : The relay corresponding with this point will activate when the point is faulted to <i>any off normal condition</i> . The relay will <u>automatically</u> reset when the point is returned to normal.
2	Relay Latches : The relay corresponding with this point will latch when the point goes into an alarm condition. This relay provides a steady output until the alarm is acknowledged by a valid passcode then cleared from alarm memory with an acknowledgment at the command center.



Only the first 24 points can have an associated relay. Relays are not available for points 25 to 40.



DO NOT attempt to use the Chg Relays? function to toggle relays reserved for special functions. Special function relays are Area and Panel Wide relay functions as well as relays assigned to CC Entr Key Rly and P## RlyResp Type?.

P## Disp as Dvc

Default: No Selections: Yes or No

Use this option to cause the command center to display CHECK DEVICE once a point is off normal or has been acknowledged after going into alarm.

	0 0	
Yes		Display CHECK DEVICE when this point is off normal.
No		Do not display CHECK DEVICE when this point is off normal.



This function can be used for devices that have a dry contact output which faults a point once the device is in a trouble condition.

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P## Local While Disarmed

Default: See Program Record Sheet

Selections: Yes or No

Use this option to allow a controlled point (*P## Type 1, 2, 3*), to report alarms, troubles and restoral reports *only* when the area is <u>armed</u>. This prompt will not affect local annunciation.

Yes	Suppress alarm, trouble and restoral* reports from this point while the area it is assigned to is disarmed.
No	Report events occurring from this point while the area is disarmed.



Local While Disarmed suppresses all reports from 24-Hour points. Do not use P## Type 0 for this prompt. Remember that this only works for disarmed points, and a Type 0 is a 24-Hour "always armed" point. Instead, choose any Type other than 0, and use a point response that will report an alarm whether the point is armed or not. For instance, P## Type 1 and P## Response 9 will report an alarm on an open or a short (I) whether the area is armed or not.

Local While Disarmed affects "Keyswitch" Points. This prompt will suppress keyswitch (troubles/restorals) and D279 (alarms/troubles/restorals). It is recommended that you do not use this parameter for these applications.

*Restoral reports are still transmitted if the alarm, trouble, or bypass (either by Sked, RAM, or Swinger bypass) condition occurred when the area disarmed, then the point restored.

P## Local While Armed

Default: No Selections: Yes or No

Use this option to allow a controlled point (*P## Type 1, 2, 3*), to report alarms, troubles and restoral reports *only* when the area is *disarmed*. This prompt will not affect local annunciation.

Yes	Suppress alarm, trouble and restoral* reports from this point while the area it is assigned to is armed.
No	Report events occurring from this point while the area is armed.



Local While Armed suppresses all reports from 24-Hour points. Do not use P## Type 0 for this prompt. Remember that this only works for disarmed points, and a Type 0 is a 24-Hour "always armed" point. Instead, choose any Type other than 0, and use a point response that will report an alarm whether the point is armed or not. For instance, P## Type 1 and P## Response 9 will report an alarm on a trouble or a short (I) whether the area is disarmed or not.

Local While Armed affects "Keyswitch" Points. This prompt will suppress keyswitch (alarms/troubles/restorals) and D279 (opening/closing/troubles/restorals). It is recommended that you do not use this parameter for controlled points that arm/disarm.

*Restoral reports are still transmitted if the alarm, trouble, or bypass (either by Sked, RAM, or Swinger bypass) condition occurred when the area disarmed, then the point restored.

P## Disable Rst

Default: No Selections: Yes or No

Use this option to disable any restoral reports from this point after it returns to normal from an alarm or trouble condition.

Yes	Disable restoral reports for this point.
No	Enable restoral reports for this point.

P## FA Retrnable

Default: No

Selections: Yes or No

Use this option to allow points that were force armed out of the area to return back to the armed state once they have become normal again without having to disarm the system.

	· ·
Yes	This point automatically returns to the system when it restores to normal.
No	This point stays out of the system until the area is disarmed.



Use on loading dock doors, which must be left open until loading is completed. Once the loading dock door is closed, the point will detect any subsequent opening and report an alarm.

P## BP Retrnable

Default: No Selections: Yes or No

Use this option to return a point which has been bypassed, force armed or swinger bypassed back into the system once the area this point is assigned to is disarmed.

Yes	This point automatically returns to the system when the area is disarmed.
No	This point stays out of the system through arming and disarming cycles.



Applicatio Note

When not allowed to return to the system through disarming, the point must be manually unbypassed using the Unbypass?, command center function, Sked functions 4 and 5 or remotely using the Remote Account Manager.



For force armed points to remain bypassed, ensure P## FA Returnable is No.

P## Bypassable

Default: No Selections: Yes or No

Use this option to allow this point to be bypassed and/or force armed.

Yes	This point can be bypassed and force armed.
No	This point can not be bypassed or force armed from the command center or Remote Account Manager (RAM). However, it can be force armed by automatic arming at the end of the closing window (see <i>Opening & Closing Auto Close</i> on page 48.) or by a Sked programmed to arm the area.

Bypassing of a 24-Hour point: When a 24-Hour point or 24-Hour supervisory point is bypassed 24 HOUR BYPASS will continuously scroll at the command center. 24 HOUR BYPASS scrolls to indicate a 24-hour non-fire point, *P## Fire* No is bypassed. FIRE BYPASS scrolls to indicate a 24-hour fire point or a fire supervisory point is bypassed.



Alternative to a 24 Hour point: To have the alarm capability of a 24-hour point without the continuous scrolling, use a perimeter point with a Point Response of 9 to E.

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A point can be bypassed at the command center using the BYPASS? function, which reports, as a COMMAND BYPASS. When bypassed by Sked function 3, the report is SKED BYPASS. When bypassed by the Remote Account Manager a RAM BYPASS will report after RAM has disconnected. When swinger shunted, a SWINGER SHUNT will be reported. If the point is not bypassable, it can not be bypassed in any of the above cases.



Programming Bypassable as Yes for Cross Points may cause missed cross-point alarms. For example, if Points 1 and 2 were programmed as Cross Points and Point 1 was Bypassed or Force Armed, Point 2 will not be able to generate an ALARM CROSS POINT event. Point 2 may, however, generate an UNVERIFIED or ALARM event depending on how the point was tripped. Careful consideration must be given when using this feature with Cross Point applications.

P## Swinger Byps

Default: No Selections: Yes or No

Use this option to allow the panel to automatically bypass a point that erroneously reports four alarms or trouble events within an hour of the first event.

The panel will report a SWINGER BYPASS P### upon the fourth report. If the point has a partial count (less than four events during an hour), the count is reset to zero and three more events are required upon the next report before the panel initiates the bypass.

Yes	Enable Swinger Bypass for this point.
No	Disable Swinger Bypass for this point.



P## Bypassable does not have to be programmed Yes for swinger bypass to work.



Application Note

A swinger shunted point will return to the system if P## BP Returnable? is Yes. If not, return the point to the system as described in the application note for P## BP Returnable.

P## Report Bypass at Occurrence

Default: No Selections: Yes or No

This option allows a point to generate a COMMAND BYPASS report as soon as a user bypasses the point from the command center. This option should be enabled for all bypassable 24-Hour points. You may also elect to report bypassed a point at the time the area is armed. See *P## Defer BP Report* on page 99.

Yes	Send a COMMAND BYPASS report at the time that the point is bypassed.
No	Do not send a COMMAND BYPASS report at the time the point is bypassed.

P## Defer BP Report

Default: No Selections: Yes or No

Use this option to prevent (*P## Type 0-F*) points that are bypassed by the user (COMMAND BYPASS) from occurring until the area is armed. Once the area is armed, the bypassed points as well as any point being bypassed during the arming sequence will report as POINT BYPASS along with the closing report.

Yes	Send a POINT BYPASS report with the closing report instead of a COMMAND BYPASS							
	when a user bypasses the point.							
No	Do not defer bypass reports.							



Bypass reports will not occur when arming the area if the closing report is suppressed by Op/Cl windows or are not being reported.

Bypass reports for 24 Hour points will not report If P## Report Bypass at Occurrence and P## Defer Bypass Report are both No.



To report the bypass at occurrence and when the area is armed, program P## Report Bypass at Occurrence and P## Defer Bypass Report as Yes. A COMMAND BYPASS report is sent as soon as it occurs and a POINT BYPASS report is sent with the closing report.

P## Cross Point

Default: No Selections: Yes or No

Note: Do not use the Cross Point functionality with Fire Points.

At present, the Cross Point feature is available only on points that are programmed as having an "Instant" **Point Response**. In addition to this, Controlled Points (Point Types 1, 2 and 3) do not follow the Cross Point operation (described below) during entry or exit delay.

The Cross Point option is designed to reduce false alarms. To achieve this, points can be programmed such that the control panel needs to see an alarm condition within a programmed period of time (called *Cross Point Time*) from at least two points within a Cross Point Group (see below) before CROSS POINT ALARM events are generated. These points must have the Cross Point option enabled in their corresponding Point Indexes to be able to generate this event. Please refer to *Section 6.7 Cross Point Parameters* on page 142 in the *RADXAUX1* handler for additional programming requirements to program the Cross Point Timer.

Cross Point *Groups* have been established in the D7212G to support the Cross Point functionality. There are five Cross Point Groups in the D7212G. Each Cross Point Group consists of eight points and is identified by the point numbers in them (*i.e.*, Cross Points 1-8, Cross Points 9-16, and so on).

Yes	This point is a Cross Point.
No	This point is not a Cross Point.

cond

Note:

The Cross Point functionality only applies to alarm conditions. It does not apply to Trouble or Supervisory conditions.

P## Fire Point

Default: See Program Record Sheet

Selections: Yes or No

Use this option to make a 24-Hour point a Fire point. This essentially makes this point the highest priority event in the panel when an alarm occurs for both reporting and displaying on the command center.

Yes	This is a Fire point.					
No	This is not a Fire point.					



Characteristics of a Fire Point

Reporting: When a group of events occur, the panel will route and print out fire reports first.

Visual Annunciation: Fire Troubles will continue to scroll until the trouble is cleared. Once

acknowledged, a FIRE TROUBLE scroll will let the end user know that a Fire Point, or group of Fire Points, is still in trouble. Panel Wide Relays Summary Fire and Summary Fire Tbl will activate if a relay is assigned when any Fire

Point goes into alarm or is in trouble.

Audible Annunciation: A Fire Point activates the A# Fire Bell relay programmed in Relay

Parameters. The amount of time and pattern of the relay activation is programmed by area in Bell Parameters A# Fire Time and A# Fire Pat.

Supervisory: A Fire Point can send a FIRE SUPERVISORY report and activate the

Summary Fire Sup and Summary Fire Tbl panel wide relays with a P##

Response of 8-9-A-B-C.

Alarm Verification: A Fire Point can delay an alarm by the time programmed in A# Verify Time

in the Area parameters.

Reset Sensor: A fire device that requires resetting can be manually reset using the reset

sensor relay for the area it is assigned to.

Fire Walk: Fire Points can be tested in the system using the Fire Walk Test which

automatically resets each point for 5 seconds when it is tripped and rings the

fire bell for 2 seconds.

You should dedicate a Fire annunciation device to all your Fire Points if they are assigned to a single area in a multiple area system. Special "red" command centers and annunciators with specific keys for fire systems are designed for this type of application (D1256 and D1257).



It is NOT recommended that the Cross Point function for Fire Points be used.

P## Alarm Verify

Default: See Program Record Sheet

Selections: Yes or No

Use this option only with Fire Points to designate them for "alarm verification".

When an alarm verification point goes into alarm, the panel removes power to all resettable points for the duration programmed in *A# Verify Time* in *Section 2.9 Area Parameters* on page 38. If the point (or another resettable point in the area) is still in alarm, or goes back into alarm within 60 seconds after the initial verification time reset, an alarm will be generated.

Yes	Enable alarm verification on this point.						
	Alarm verification points must be programmed as <i>Resettable</i> .						
No	Disable alarm verification on this point.						



During a Fire Walk Test the reset time is 5 seconds. The time programmed in A# Verify Time is ignored.

Point Assignments

P## Resettable

Default: See Program Record Sheet

Selections: Yes or No

Use this option if this is a powered point that requires interruption of power to reset a latched alarm condition. The "resettable point" option is typically used with smoke detectors and glass break detectors.

When initiated either through a Fire Walk Test or the command center's **Reset Sensor?** function or when the Remote Account Manager interrupts power to the device for 5 seconds; SENSOR RESET is reported to the central station receiver.

Yes	This point is reset by the Reset Sensor? function and during the alarm verification sequence.						
No	This point is not resettable.						



WARNING! When a sensor reset is initiated, the panel will not accept alarms from any points that have P## Resettable programmed as Yes. During the 5 second reset time, alarms from these points are ignored.

Do not mix fire and intrusion devices on the same powered loop.

4.2 Point Assignments

These entries assign Point Indexes to Points 1 - 40 for the D7212G and assign the points to the areas. Also included in this section are parameters used to set the point's debounce count, BFSK/Relay (for use when transmitting in BFSK or assigning relays to follow alarms for a group of points), and custom command center and report text for each point.

Point Number

Default: 1 Selections: 1 – 40

Enter the point number you are programming. When transmitting in Modem IIIa² the three-digit point number is reported to the D6500/D6600. When transmitting in BFSK you must assign a "zone number" in *BFSK/Relay*.

P### Point Index

Default: See Program Record Sheet

Selections: (Blank) (00) – 31

This entry selects one of the 31 *P## Index* Codes that define the points' characteristics and determine how the panel responds to various point conditions.

(Blank) (00) disables the point.



MISSING POINT reports will occur if a point address does not exist for a point that is assigned a point index. EXTRA POINT events will occur if more than two devices have the same address.

When a POPIT goes missing, the panel will generate the following responses based on the point type:

Fire points generate Missing Trouble responses.

Non-fire 24-hour points generate Missing Alarm responses.

Non-fire, non- 24-Hour points generate Missing Alarm responses while armed and Trouble responses while disarmed. Exception: Non-fire, non-24-Hour points that have a Point Response of 9 - D will generate a Missing Alarm response while disarmed.

POPIT modules monitor their sensor loops for three conditions, loop normal, loop open, and loop shorted. They report these three conditions to the control panel. The panel uses point programming to interpret the sensor loop information reported by the POPITs and to make the appropriate system response.

Point Assignments

P### Area Assign

Default: 1 Selections: 1 – 4

The areas are numbered 1 to 4. Select the area number to which the point will be assigned.



The D7212G allows up to only four areas. Although the D5200 allows entries for Areas 5 through 8, they are not applicable for use on the D7212G.

If Areas 5 through 8 are inadvertently programmed on the D7212G, the command center will display CALL FOR SERVICE.

P### Debounce

Default: 2 **Selections:** 1 − 15

The debounce count is the number of times the panel scans a point before initiating an alarm. Scan cycles are 300 ms. For appropriate settings consult the manufacturer's instructions for the device connected to this point.

1 =	.300 seconds	6 =	1.8 seconds	11 =	3.3 seconds
2 =	.600 seconds	7 =	2.1 seconds	12 =	3.6 seconds
3 =	.900 seconds	8 =	2.4 seconds	13 =	3.9 seconds
4 =	1.2 seconds	9 =	2.7 seconds	14 =	4.2 seconds
5 =	1.5 seconds	10 =	3.0 seconds	15 =	4.5 seconds



Bosch Security Systems recommends an entry of 2 or higher. Interior Follower points should have a debounce of at least three.

P### BFSK/Relay

Default: See Program Record Sheet

Selections: 0-9

Use this option for two reasons. First, it can be used to determine the point number reported in BFSK when this point is tripped. In addition, you can use this option to activate a relay when the point goes into an alarm condition, even if the panel is programmed for Modem reporting as shown in the matrix below.



BFSK/Relays do not activate for Fire Supervisory or non-Fire Supervisory points.

D8129 on Zonex Bus 1 for D7212G. Address setting = 1(0n)-2(0FF)-3(On)-4(On)

BFSK Code	Trips Relay	BFSK Code	Trips Relay	BFSK Code	Trips Relay	BFSK Code	Trips Relay
1 =	9	3 =	11	5 =	13	7 =	15
2 =	10	4 =	12	6 =	14	8 =	16

Table 33: P### BFSK/Relay Codes/Relays

Note: Local annunciation on the command centers and Local Printer reporting as well as the View Log display the actual point number (1 - 40) not the BFSK report code.



Do not assign a BFSK/Relay to invisible points. To avoid triggering a BFSK/Relay, program this prompt as "0."

On the D7212G, do not use relays 9 through 16 for Area or panel wide relay functions when using BFSK relays. Doing so will prevent BFSK relays from triggering.

CMD 7 and CMD 9



Two relays may activate when this point goes into alarm if the P## Rly Resp Type for this point is programmed.

These codes can be used to activate relays on the D8129 OctoRelay (or C8137 Transmitter Interface). You can assign the same code to several points and effectively provide a "summary zone" alarm output. When the point goes into alarm the relay activates. When the alarm is acknowledged and is no longer scrolling in the command center display, the relay resets.

P### Point Text

Default: See Program Record Sheet

Selections: Up to 16 Characters Alphanumeric

Enter Alphabet characters (A-Z) in Capital Letters

Enter up to sixteen characters of text to describe the point. This point text is displayed at command centers (if the point is programmed as "visible") and reported to the D6500/D6600 when transmitting in Modem IIIa² format (if it is a reporting point).

It is recommended that you include the point number in custom point text. This helps the user when viewing events, initiating bypasses, etc. and can simplify troubleshooting.



Application Note

When a D1260 Command Center is installed on the system, the Point Text for Points 240 to 243 can be used for Area Name Text for Areas 1 to 4, respectively. Please refer to the following table.

Point Text	Corresponding Area Name Text
Point 240	Area 1
Point 241	Area 2
Point 242	Area 3
Point 243	Area 4

4.3 CMD 7 and CMD 9

These entries assign Point Indexes, BFSK report code, BFSK relay that trips and the text for the CMD 7 and CMD 9 command center functions.

CMD 7 Point Index

Default:

Selections: (Blank) (00) - 31

This entry selects one of the 31 *P## Index* Codes that define how the panel will react when a CMD 7 is initiated.



The point index code used for CMD 7 must not be used for any other points on the system.

CMD7 BFSK/Relay

Default: 0 - 9**Selections:**

This entry selects one of the digits shown for reporting in BFSK or for activating relays 9-16 for the D7212G (see P## **BFSK/Relay** in point assignments) when a CMD 7 is initiated.

CMD 7 does not activate the Summary Fire Alarm relay.

RADXPNTS

CMD 7 and CMD 9

CMD7 Point Text

Default: [COMMAND 7]

Selections: Up to 16 Characters Alphanumeric

Enter Alphabetic characters A-Z in Capital Letters

Enter up to sixteen characters of text to describe the point. This point text is displayed at command centers (if the point is programmed as "visible") and reported to the D6500/D6600 when transmitting in Modem IIIa² format (if it is a reporting point).

CMD9 Point Index

Default: 31

Selections: (Blank) (00) – 31

This entry selects one of the 31 *P## Index* Codes that define how the panel will react when a CMD 9 is initiated.



The point index code used for CMD 9 must not be used for any other points on the system.

CMD9 BFSK/Relay

Default: 1 Selections: 0 - 9

This entry selects one of the digits shown for reporting in BFSK or for activating relays 9-16 for the D7212G (see *P## BFSK/Relay* in point assignments) when a CMD 9 is initiated.

Note: Command 9 does not activate the Summary Fire Alarm relay.

CMD9 Point Text

Default: [COMMAND 9]

Selections: Up to 16 Characters Alphanumeric

Enter Alphabet characters (A-Z) in Capital Letters

Enter up to sixteen characters of text to describe the point. This point text is displayed at command centers (if the point is programmed as "visible") and reported to the D6500/D6600 when transmitting in Modem IIIa² format (if it is a reporting point).

Windows

5.0 RADXSKED

5.1 Windows

Use this programming module to define the windows for *Opening & Closing* and *User Access*.

5.1.1 Opening & Closing

Use these windows to set a schedule for disarming and arming. The disarming and arming schedules provide several independent features:

- Suppress normal opening and/or closing reports when A# Disable O/C in Window is programmed Yes.
- Generate a FAIL TO OPEN report if the area is not disarmed on schedule when *A# Fail To Open* is programmed **Yes**.
- Provide a warning tone and a PLEASE CLOSE NOW display at the command center when it is time to arm
 the area.
- Generate a FAIL TO CLOSE report if the area is not armed on schedule when *A# Fail To Close* is programmed Yes.
- Automatically arm the area at the end of the closing window when A# Auto Close is programmed Yes.

Opening and closing schedules can be set up independently. For example, if you only want to use features provided by closing windows, leave times (**Blank**) in the opening windows prompts and program closing window times.

A worksheet is provided at the end of this section for your convenience. Following the worksheet are examples of how to program opening and closing windows for particular applications.

About the Program Record Sheet: A column labeled "Sked #" appears on the record sheet provided with the panel. These numbers appear in D6500/D6600 reports and local printer reports when the window **Begin Time** executes.

Window selections 1 through 8 correspond with odd numbered Skeds 41 through 55 for Open Window and correspond with even numbered Skeds 42 through 56 for Close Window. For example, when the Opening Window for Window 1 executes, a SKED 41 EXECUTED event is generated. Please refer to the following table.

Selection	Sked #	Window	Sked #	Window
1	41	Open	42	Close
2	43	Open	44	Close
3	45	Open	46	Close
4	47	Open	48	Close
5	49	Open	50	Close
6	51	Open	52	Close
7	53	Open	54	Close
8	55	Open	56	Close

Window

Default: 1 Selections: 1 – 8

Enter the Window number you want to program.

W# Sunday

Default: No Selections: Yes or No

This prompt, and the next six "day of the week" prompts, select the days of the week that the opening and/or closing windows are active.

RADXSKED

Windows

Exceptions:

To prevent the windows from activating on certain days of the year, program *Xept Holiday* Yes, and enable at least one Holiday Index. When *Xept Holiday* is Yes, the window executes on the days of the week programmed *unless the Holiday Index designates the date as a Holiday*.

If opening and/or closing windows are only needed on certain days of the year, do not program the windows to execute on any days of the week. Instead, program *Xept Holiday* No, and select a Holiday Index with the days of the year you want the window to be active.

Yes	Activate this window on Sundays.
No	Do not activate this window on Sundays.

W# Monday

Default: No Selections: Yes or No

W# Tuesday

Default: No Selections: Yes or No

W# Wednesday

Default: No Selections: Yes or No

W# Thursday

Default: No Selections: Yes or No

W# Friday

Default: No Selections: Yes or No

W# Saturday

Default: No Selections: Yes or No

W# Open Early Begin

Default: $\underline{0} \underline{0} : \underline{0} \underline{0}$

Selections: HH:MM (hours and minutes)

00:00 to 23:59

Open Early Begin: This program item is one of three required to create an opening window. To finish programming an opening window, *Open Window Start* and *Open Window Stop* must be programmed.

Windows

Use *Open Early Begin* to set the time that you want the panel to look for an opening window. When opening and closing reports are enabled, disarming the area between midnight and the *Open Early Begin* time generates an OPENING REPORT. In addition:

• If *Disable O/C in Window* is Yes

Disarming the area between the *Open Early Begin* is and the *Open Window Start* time generates an EARLY TO OPEN event. (If the *Open Early Begin* time is the same as the *Open Window Start* time, the EARLY TO OPEN event is not sent.)

- Disarming the area between the *Open Window Start* and *Open Window Stop* time creates a local event in the PANEL log but does not send the opening report to the central station.
- Disarming the area after the *Open Window Stop* and the next window's *Open Early Begin* time (or midnight, whichever comes sooner) generates a LATE TO OPEN event.

• <u>If Disable O/C in Window is Yes</u>

Disarming the area generates an OPENING REPORT without the "early" or "late" modifier, regardless of when the area is disarmed.

When you are programming multiple windows to activate on a single day, program the windows in chronological order. Be careful not to program a window's *Open Early Begin* time for a time that is between any other window's *Open Window Stop* time.



DO NOT program a window to cross the midnight boundary.

Disabled windows have a blank "Begin" time. If the entry for this prompt is (**Blank**), but times are programmed for *Open Window Start* and *Open Window Stop* the window is disabled.

To disable the window, both the hours and minutes spaces must be (Blank).

00:00 is Midnight, 23:59 is 11:59 P.M. Make entries using a 24-hour clock (for example, 7:00 AM is entered as 07:00, 2:45 PM is entered as 14:45).

Disable/Restart the panel to activate today's window. If you are programming a window that needs to activate on the same day that you are programming it, do a disable/restart after programming.

W# Open Window Start

Default: 00:00

Selections: HH:MM (hours and minutes)

Enter the time that you want the panel to start the opening window. The window goes into effect at the beginning of the minute.

00:00 is Midnight, 23:59 is 11:59 P.M. Make entries using a 24-hour clock (for example, 7:00 AM is entered as 07:00, 2:45 PM is entered as 14:45).

This program item is one of three required to create an opening window. To program an opening window, *Open Early* Begin and Open *Window Stop* must also be programmed.

See *Open Early Begin* for report feature explanations.

W# Open Window Stop

Default: $\underline{0} \underline{0} : \underline{0} \underline{0}$

Selections: HH:MM (hours and minutes)

Enter the time that you want the panel to end the opening window. The window stops at the end of the minute.

00:00 is Midnight, 23:59 is 11:59 P.M. Make entries using a 24-hour clock (for example, 7:00 AM is entered as 07:00, 2:45 PM is entered as 14:45).

This program item is one of three required to create an opening window. To program an opening window, *Open Early* Begin and Open *Window Start* must also be programmed.

Windows

If the area is not disarmed by the time the *Open Window Stop* time expires, the panel generates a FAIL TO OPEN report if enabled in *Fail To Open*.

Opening reports generated between the *Open Window Start* time and *Open Window Stop* time can be suppressed by programming *Disable O/C in Window Yes.* See *Open Early Begin* for other report feature explanations.

Do not use a time of 23:59 as a window-stop time unless another window begins on the next day at 00:00.

FAIL TO OPEN reports are not sent for windows that stop at 23:59.

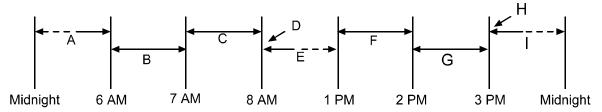


Figure 2: Example Opening Window Timeline (using 2 opening windows on same day)

Area	Description
A	Areas that are disarmed between midnight and 6 AM generate Opening reports.
В	Areas that are disarmed between 6 AM and 7 AM generate Early to Open reports.
С	If the area is disarmed between 7 AM and 8 AM regular Opening Reports are generated. If Disable O/C in Window is programmed as "yes" the Opening Report is not transmitted to the central station.
D	If the area is not disarmed by 8:01 AM then a Fail to Open event is generated if <i>Fail to Open</i> is programmed as "yes" in Opening and Closing Options.
Е	If the user disarms the area between 8:01 AM and 12:59 PM then a Late to Open event is generated.
F	Areas that are disarmed between 1 PM and 2 PM generate Early to Open reports.
G	If the area is disarmed between 2 PM and 3 PM regular Opening Reports are generated. If Disable O/C in Window is programmed as "yes," the Opening Report is not transmitted to the central station.
Н	If the area is not disarmed by 3:01 PM then a Fail to Open event is generated if <i>Fail to Open</i> is programmed as "yes" in Opening and Closing Options.
I	If the user disarms the area between 3:01 PM and 11:59 PM then a Late to Open event is generated.

Table 34: Area Descriptions

	OPEN			OPEN						
W#	Day of Week	Early Begin	Start	Stop	Early Begin	Start	Stop	eXcept On Holiday	Holiday Index	Area(s)
1	SMTWTFS	06: 00	07:00	08: 00				Yes / No	1 2 3 4	<u>1</u> 2 3 4
2	SMTWTFS	13:00	14:00	15:00				Yes / No	1 2 3 4	<u>1</u> 2 3 4

Table 35: Programming for Two Same-Day Opening Windows (see Timeline)

Do not program a single window to cross the midnight boundary. The window stop time must be later than the window start time. To program a window that effectively crosses the midnight boundary, you have to program two windows.

For example, to program windows for an area that opens between 11:30 PM and 12:30 AM, five days a week, use two windows as shown in the example below:

		OPEN			CLOSE					
W#	Day of Week	Early Begin	Start	Stop	Early Begin	Start	Stop	eXcept On Holiday	Holiday Index	Area(s)
1	<u>S M T W T</u> F S	22:00	23:30	23:59				Yes No	1 2 3 4	<u>1</u> 2 3 4
2	S <u>M T W T F</u> S	00:00	00:00	00:30				Yes No	1 2 3 4	<u>1</u> 2 3 4

Table 36: Programming to Link Two Days over Midnight

W# Close Early Begin

Default: $\underline{0} \underline{0} : \underline{0} \underline{0}$

Selections: HH:MM (hours and minutes)

00:00 to 23:59

Close Early Begin: This program item is one of three required to create a closing window. To finish programming a closing window, *Close Window* Start and Close *Window Stop* must be programmed.

Use *Close Early Begin* to set the time that you want the panel to look for a closing window. When opening and closing reports are enabled, arming the area between midnight and the *Close Early Begin* time generates a CLOSING REPORT. In addition:

If Disable O/C in Window is Yes

Arming the area between the *Close Early Begin* time and the *Close Window Start* time generates a CLOSING EARLY event. (If the *Close Early Begin* time is the same as the *Close Window Start* time, the CLOSING EARLY event is not sent.)

Arming the area between the *Close Window* Start and Close *Window Stop* time creates a local event in the PANEL log but does not send the CLOSING REPORT to the central station.

Arming the area after the *Close Window Stop* and the next window's *Close Early Begin* time (or midnight, whichever comes sooner) generates a CLOSING LATE event.

• If *Disable O/C in Window* is No

Disarming the area generates a CLOSING REPORT without the "early" or "late" modifier, regardless of when the area is armed.

When you are programming multiple windows to activate on a single day, program the windows in chronological order. Be careful not to program a window's *Close Early Begin* time for a time that is between any other window's *Close Window Stop* time.

Disabled windows have a blank "Begin" time. If the entry for this prompt is **(Blank)**, but times are programmed for *Close Window Start* and *Close Window Stop*, the window is disabled.

To disable the window, both the hours and minutes spaces must be (Blank).

00:00 is Midnight, 23:59 is 11:59 P.M. Make entries using a 24-hour clock (for example, 7:00 AM is entered as 07:00, 2:45 PM is entered as 14:45).

Disable/Restart the panel to activate today's window. If you are programming a window that needs to activate on the same day that you are programming it, do a disable/restart after programming.

Windows

W# Close Window Start

Default: $\underline{0} \underline{0} : \underline{0} \underline{0}$

Selections: HH:MM (hours and minutes)

Enter the time that you want the panel to start the closing window. The window goes into effect at the beginning of the minute.

00:00 is Midnight, 23:59 is 11:59 P.M. Make entries using a 24-hour clock (for example, 7:00 AM is entered as 07:00, 2:45 PM is entered as 14:45).

This program item is one of three required to create a closing window. To program a closing window, *Close Early* Begin and Close *Window Stop* must also be programmed.

If the area is not armed when the *Close Window Start* time comes, a warning tone sounds and [PLEASE CLOSE NOW] displays at the command center. To temporarily silence the tone, press the [ESC] key on the command center. The warning tone restarts in 10 minutes if the area is not armed.

See *Close Early Begin* for report feature explanations.

W# Close Window Stop

Default: $\underline{0} \underline{0} : \underline{0} \underline{0}$

Selections: HH:MM (hours and minutes)

Enter the time that you want the panel to end the closing window. The window stops at the end of the minute.

00:00 is Midnight, 23:59 is 11:59 P.M. Make entries using a 24-hour clock (for example, 7:00 AM is entered as 07:00, 2:45 PM is entered as 14:45).

This program item is one of three required to create a closing window. To program a closing window, *Close Early* Begin and Close *Window Start* must also be programmed.

If the area is not armed by the time the *Close Window Stop* time expires, the panel generates a FAIL TO CLOSE report if enabled in *Fail To Close*.

Closing reports generated between the *Close Window Start* time and *Close Window Stop* time can be suppressed by programming *Disable O/C in Window Yes*. See *Close Early Begin* for other report feature explanations.

Do not use a time of 23:59 as a window-stop time unless the window continues on the next day at 00:00. FAIL TO CLOSE reports are not sent, and the *Auto Close* feature does not work for windows that stop at 23:59.

Do not program a single window to cross the midnight boundary. The window stop time must be later than the window start time. To program a window that effectively crosses the midnight boundary, you have to program two windows.

For example, to program windows for an area that closes between 11:30 PM and 12:30 AM, five days a week, use two windows as shown:

	OPEN CLOSI			CLOSE						
W#	Day of Week	Early Begin	Start	Stop	Early Begin	Start	Stop	eXcept On Holiday	Holiday Index	Area(s)
1	<u>S M T W T</u> F S				22:00	23:30	23:59	Yes <u>No</u>	1 2 3 4	<u>1</u> 2 3 4
2	S M T W T F S				00:00	00:00	00:30	Yes No	1 2 3 4	<u>1</u> 2 3 4

Table 37: W# Close Window Stop Programming Example

W# Xept Holiday

Default: No Selections: Yes or No

This entry allows you to determine if the window is disabled on holidays, or is active only on holidays.

To prevent the windows from activating on certain days of the year, program *Xept Holiday* Yes, and enable at least one Holiday Index. When *Xept Holiday* is programmed Yes, the window executes on the days of the week programmed *unless the date is designated as a Holiday by the Holiday Index(es) selected.*

Yes	Do not activate this window on holidays.
	To use this selection, the window must be programmed to activate on at least one day of the week and a Holiday Index must be enabled.
No	A holiday will not prevent this window from activating.
	You also use this selection if opening and/or closing windows are only needed on certain days of the year. Do not program the windows to execute on any days of the week. Instead, program <i>Xept Holiday</i> No, and select at least one Holiday Index with the days of the year you want the window to be active.

5.1.1.1 Holiday Indexes for O/C Windows

You can enable up to four Holiday Indexes for use with Opening/Closing Windows. Enable at least one Holiday Index if *W# Xept Holiday* is programmed **Yes** for this Window, or if you want this window to activate only on specific dates. Holidays are programmed in *Section Holiday Indexes*, beginning on page 123.

W# Holiday 1

Default: No Selections: Yes or No

Yes	Use Holiday Index 1 with this Window.
No	Do not use Holiday Index 1 with this Window.

W# Holiday 2

Default: No Selections: Yes or No

W# Holiday 3

Default: No Selections: Yes or No

W# Holiday 4

Default: No Selections: Yes or No

W# Area 1 [through 4]

Default: No Selections: Yes or No

This item determines whether this window will activate in each of the available 4 areas.

Yes	Activate the window in the area number (#) specified.
No	Disable the window in the area number (#) specified.



The D7212G allows up to only four areas. Although the D5200 allows entries for Areas 5 through 8, they are not applicable for use on the D7212G.

If Areas 5 through 8 are inadvertently programmed on the D7212G, the command center will display CALL FOR SERVICE.

5.1.1.2 Opening/Closing Windows Worksheet

		OPEN			CLOSE					
W#	Day of Week	Early Begin	Start	Stop	Early Begin	Start	Stop	eXcept On Holiday	Holiday Index	Area(s)
1	SMTWTFS	:	:	:	:	:	:	Yes No	1 2 3 4	<u>1</u> 2 3 4
2	SMTWTFS	:	:	:	:	:	:	Yes No	1 2 3 4	<u>1</u> 2 3 4
3	SMTWTFS	:	:	:	:	:	:	Yes No	1 2 3 4	<u>1</u> 2 3 4
4	SMTWTFS	:	:	:	:	:	:	Yes No	1 2 3 4	<u>1</u> 2 3 4
5	SMTWTFS	:	:	:	:	:	:	Yes No	1 2 3 4	<u>1</u> 2 3 4
6	SMTWTFS	:	:	:	:	:	:	Yes No	1 2 3 4	<u>1</u> 2 3 4
7	SMTWTFS	:	:	:	:	:	:	Yes No	1 2 3 4	<u>1</u> 2 3 4
8	SMTWTFS	:	:	:	:	:	:	Yes No	1 2 3 4	<u>1</u> 2 3 4

Table 38: Opening/Closing Windows Worksheet

Use this table to determine the proper entries for your application.

	The column below briefly describes the ways to activate an Opening/Closing Window. Use the guidelines shown in the other columns to	eXcept On		
Day of Week	choose the appropriate entries.	Holiday	Holiday Index	Areas
Program at least one day as Yes .	Day(s) of the Week	No	None	Program at least one area as Yes .
Program at least one day as Yes .	Day(s) of the Week, but NOT on Holidays	Yes	Select at least one Index	Program at least one area as Yes .
Program at least one day as Yes .	Day(s) of the Week, PLUS Holidays	No	Select at least one Index	Program at least one area as Yes .
All days must be programmed No.	Only on Holidays	No	Select at least one Index	Program at least one area as Yes .

Table 39: Opening/Closing Windows

Normal Store Hours

Monday - Friday, Opening between 5-6 AM. Closing between 11 PM-1 AM.

	OPEN			CLOSE						
W#	Day of Week	Early Begin	Start	Stop	Early Begin	Start	Stop	eXcept On Holiday	Holiday Index	Area(s)
1	S MTWTFS	04: 00	05:00	06: 00	20: 00	23:00	23: 59	Yes No	1 2 3 4	<u>1</u> 2 3 4
2	S M <u>T W T F S</u>	:	:	:	00:00	00:00	01:00	Yes No	1 2 3 4	<u>1</u> 2 3 4

Delivery Schedule

Monday and Wednesday, In between 2:45-3:00 AM. Out between 3:15-3:30 AM.

Another alternative for delivery schedules would be to automatically bypass specific points using Skeds.

			OPEN			CLOSE					
	W#	Day of Week	Early Begin	Start	Stop	Early Begin	Start	Stop	eXcept On Holiday	Holiday Index	Area(s)
	3	S <u>M</u> T <u>W</u> T F S	02:30	02:45	03:00	03:05	03: 15	03: 30	Yes No	<u>1</u> 2 3 4	<u>1</u> 2 3 4
Ī											
		Program at least one day as Yes .	Day(s) of the	Day(s) of the Week, but NOT on Holidays						Select at least one Index	Program at least one Area as Yes .

Monthly Auditor's Schedule

Sunday, In between 8-8:30 AM. Out between 2:30-5:00 PM.

OPEN			CLOSE							
W#	Day of Week	Early Begin	Start	Stop	Early Begin	Start	Stop	eXcept On Holiday	Holiday Index	Area(s)
4	SMTWTFS	07:00	08:00	08:30	14:00	14: 30	17: 00	Yes No	1 2 3 4	<u>1</u> 234
	All days must be programmed No.	Only On H	olidays					No	Select at least one Index	Program at least one Area as Yes .

5.1.2 User Group Windows

In this section, you can create up to eight User Group periods in which the passcodes for the group chosen will be enabled. One user group can have multiple windows assigned to it within a 24-hour period. See *U### User Group*, in *Section 3.1 Passcode Worksheet* on page 91 to assign individuals to a group.

When you assign a *U### User Group* to one of the eight windows, all passcodes for the group will be enabled ONLY for the period between the Enable Time and Disable Time for assigned User Window #.

If a user is not assigned to a *U### User Group* or the number programmed for the user for *U### User Group* is not assigned to a *User Window #*, the passcode for that user is enabled all the time.

User Windows

Default: 1 Selections: 1 – 8

Enter the User Window number you want to program.

UW# User Group

Default: 1

Selections: (Blank), 1 - 8

Enter the number programmed for the group of users in the *U### User Group* prompt. This group will have their user passcodes enabled/disabled when this window runs.



A User Group can be assigned to more than one window in a 24-hour period, but the windows must not overlap or exceed the midnight boundary.

UW# Sunday

Default: No Selections: Yes or No

This prompt, and the next six "day of the week" prompts, select the days of the week that the *User Group* window is active.



See W# Sunday in O/C Windows instructions for more information about programming this prompt.

UW# Monday

Default: No Selections: Yes or No

Windows

UW# Tuesday

Default: No

Selections: Yes or No

UW# Wednesday

Default: No Selections: Yes or No

UW# Thursday

Default: No Selections: Yes or No

UW# Friday

Default: No Selections: Yes or No

UW# Saturday

Default: No Selections: Yes or No

UW# Group Enable

Default: 00:00

Selections: HH:MM (hours and minutes)



This prompt must be programmed if this User Group Window is assigned to a user group.

Enter the time of day that the window starts. Beginning at this time, users assigned to this window's group will be allowed to use their passcodes. The window goes into effect at the beginning of the minute. Make entries using a 24-hour clock (for example, 7:00 AM is entered as 07:00, 2:45 PM is entered as 14:45).

Disable/Restart the panel to activate today's window. If you are programming a window that needs to activate on the same day that you are programming it, do a disable/restart after programming.

UW# Group Disable

Default: $\underline{0} \underline{0} : \underline{0} \underline{0}$

Selections: HH:MM (hours and minutes)



This prompt must programmed if this User Group Window is assigned to a user group.

Enter the time of day that the window ends. This time marks the end of the period in which users assigned to this window's group will be able to use their passcodes. The window stops at the end of the minute. Make entries using a 24-hour clock (for example, 7:00 AM is entered as 07:00, 2:45 PM is entered as 14:45).

To disable the window, both the hours and minutes spaces must be (Blank).

Do not program a single window to cross the midnight boundary. The window stop time must be later than the window start time.

Skeds

5.1.2.1 Holiday Indexes for User Group Windows

You can enable up to four Holiday Indexes to use with User Group Windows. Enable at least one Holiday Index if *UW# Xept Holiday* is programmed **Yes** for this User Window, or if you want this window to activate only on specific dates. Holidays are programmed in *Section 5.3 Holiday Indexes* on page 123.

UW# Xept Holiday

Default: No Selections: Yes or No

This entry allows you to determine if the window is disabled on holidays, or is active only on holidays. Use the instructions provided in *W# Xept Holiday*.

UW# Holiday 1

Default: No Selections: Yes or No

UW# Holiday 2

Default: No Selections: Yes or No

UW# Holiday 3

Default: No Selections: Yes or No

UW# Holiday 4

Default: No Selections: Yes or No

5.2 Skeds

Use the *SKEDS* module to program the PANEL to automatically execute functions that are otherwise initiated by the end user at the command center. Each Sked can be programmed to occur at a specific time on a specific date or day of the week. Up to 40 Skeds can be programmed.

A Sked can be edited from the command center if *S## Time Edit?* is yes. The date and time can be changed using the **Change Sked?** function.

Each *Sked Number* can be programmed with one of sixteen functions for the *S## Function Code*. A function is what will be executed. In addition to the function, a choice has to be made as to what will be affected by the function (e.g., when choosing a Disarm Sked, the disarming is the function while the areas that are being chosen to become disarmed are what is affected).

The functions and their associated parameters are listed in the "Sked Function Code Table" in the *Program Record Sheet*, and they are explained in detail following the *S## Function Code* prompt.

Each Sked can be programmed with up to four Holiday Indexes. The Holiday Indexes can be used to execute the Sked on the Holidays in addition to the Date or Day(s) of the Week, *or*, they can be used to prevent the Sked from executing on the Holidays (see *S## Xept Holiday*).

Sked Number

Default: 1 Selections: 1 – 40

Enter the number of the Sked you are programming.

Skeds

S## TimeEdit

Default: Yes Selections: Yes or No

Select whether the user can edit the time of this Sked from the command center.

Yes	The user can edit the time of this Sked from the command center and it will appear in the CHG SKED display.
No	The user cannot edit the time of this Sked from the command center and it will NOT appear in the CHG SKED displays.

S## Function Code

Default: (Blank)

Selections: 1 – 11, 13 – 15, 28, 29

Enter the Function Code you want this Sked to execute. Sked Function 12 is reserved and is not a valid entry.

The programmer automatically displays the available parameter choices and range fields for this function. (e.g., Yes/No is automatically displayed for the areas when choosing the arm/disarm function while a blank prompt exists for the point number you want to bypass when choosing the bypass point function).

After you program the parameter choices associated with the Sked function, press EXIT GROUP to continue programming the Sked for date, day of week, time, and holiday.

1	Arm Area. This function simulates the MASTER ARM DELAY command center function. Entries in
	the S## Area # prompts define the area(s) this Sked arms. The Sked can arm multiple areas. If any
	point is faulted when the Sked executes, it is force armed regardless of FA/Bypass max.

S## Area 1 [through 4]

Default: No Selections: Yes or No

Enable the Sked to arm the areas indicated with Yes.

	Yes		Arm Area #
	No		Do not arm Area #
2			rea. This function emulates the [DISARM] command center function. Entries in the
		S## Area	#prompts define the area(s) this Sked disarms. The Sked can disarm multiple areas.

S## Area 1 [through 4]

Default: No Selections: Yes or No

Enable the Sked to disarm the areas indicated with Yes.

Yes	Disarm Area #	
No	Do not disarm Area #	



Do not enable Areas 5 through 8 as they are not available with the D7212G.

9	3	Bypass a Point. This function emulates the Bypass Pt? Command center function. The entry in the
		S## <i>Point Number</i> prompt defines the point this Sked bypasses. The point can be bypassed only if
		Bypassable is programmed Yes in the Point Index assigned to the point. The bypass is reported if
		Bypass Reports are enabled in the <i>Point Index</i> assigned to the point. The Sked can bypass one point.

Skeds

S## Point Number

Default: (Blank) Selections: (Blank), 1 – 40

Enter the number of the point the Sked bypasses.

	(Blank) (0)	No point is to be bypassed.
	1 – 40	Point to bypass.
4	Unby the S# point	pass a Point. This function emulates the Unbypass Pt? command center function. The entry in # Point Number prompt defines the point this Sked unbypasses. The Sked can unbypass one

S## Point Number

Default: (Blank) Selections: (Blank), 1 - 40

Enter the number of the point the Sked unbypasses.

	(Blank) (0)		No point is to be unbypassed.
	1 - 40		Point to unbypass.
5	5 Unbypas S## Area		**All Points. This function is not available as a command center function. The entry in the #prompt defines the area(s) where the Sked unbypasses all points. The Sked unbypasses all the area, regardless of how they were bypassed. This Sked can unbypass all points in multiple

S## Area 1 [through 4]

Default: No Selections: Yes or No

Enable the Sked to unbypass all points the areas indicated with Yes.

Yes	Unbypass all points in Area #	
No	Do not unbypass all points in Area #	



Do not enable Areas 5 through 8 as they are not available with the D7212G.

6	Relay On. This function emulates the Chg Relay? command center function to turn relays ON. The
	entry in the S## Relay Number prompt defines the specific relay this Sked activates. The Sked can activate one relay.

S## Relay Number

Default: (Blank) Selections: (Blank), 1 – 24

Enter the number of the relay the Sked activates.

	(Blank)		No relay is activated.
	1 – 24		Relay to activate.
7	entry in th		This function emulates the Chg Relay ? command center function to turn relays OFF. The ne S## Relay Number prompt defines the relay this Sked turns off. The Sked can turn off s that were set by a Sked. The Sked can turn off one relay.

Skeds

S## Relay Number

Default: (Blank) Selections: (Blank), 1 - 24

Enter the number of the relay the Sked turns off.

	(Blank)	No relay is turned off.
	1 – 24	Relay to turn off.
8		All Relays Off. This function is not available as a command center function. This Sked function turns off all relays that were turned on by a Sked. This is a panel wide function.
		There are no other parameters that require input for this option.
9		Test Report . This function emulates the Send Report ? command center function. This function generates a test report ONLY from Area 1 but contains panel wide status information. The report is sent to the Phone(s) programmed for Test and Status Reports in <i>Phone Routing</i> . If Expand Test Prt in Phone is programmed Yes , the test report also includes all off-normal states for
		events listed in <i>Diagnostic Reports</i> and <i>Test Reports</i> (see <i>Section 2.3 Routing</i> on page 16).
		The test report can be deferred if any other report was sent since the last test report. To defer the test report, program S ## <i>Defer Test</i> .
		The test report can be sent every hour beginning at the time scheduled in <i>S## Time</i> . To send a test report every hour, program <i>S## Hourly Rpt</i> .

S## Defer Test

Default: No Selections: Yes or No

Enable Sked to defer the test report.

Yes	Defer the test report.
No	Send the test report on schedule.

S## Hourly Rpt

Default: No Selections: Yes or No

Enable Sked to send the test report every hour.

	Yes		Send the test report every hour.
	No		Send the test report only as scheduled.
10		to the Pho The status	port. This function generates a status report for each area that is enabled. The report is sent one(s) programmed for Test and Status Reports in <i>Phone Routing</i> . It is report can be deferred if any other report was sent since the last status report. To defer the ort, program S## <i>Defer Status</i> .

S## Defer Status

Default: No Selections: Yes or No

Enable Sked to defer the status report.

	Yes		Defer the status report.
	No		Send the status report on schedule.
11	Execute Commandexecutes a Center ar required.		Custom Func. This function emulates any of the custom functions assigned to the denter that can be executed by a user from the command center. When a Sked a Custom Function, it is subject to the scope of the selected command center. <i>Cmd</i> ad Custom <i>Func</i> prompts appear after entering function code 11. Both entries are Avoid having multiple functions occur at the same time at the same address. Functions and the effect on the panel is unpredictable.

Skeds



Review to make sure that the Custom Function being executed or any of the commands nested inside the Custom Function are not passcode protected.



Do not program multiple Skeds to execute at the same command center during the same time of execution.

Do not program Skeds to execute at times when a user is likely to be executing functions at the command center. If it is necessary to do so, there are two ways to work around the situation:

- 1. Program "CC" at the beginning of the Custom Function Key Strokes entry. This will abort the user's function and allow the Sked to execute.
- 2. Program the Sked to execute at an address (Cmd Center) that has no command center physically attached to it. The CC # must be assigned to an area and have the appropriate Scope programmed.

S## Cmd Center

Default: (Blank) (0) Selections: (Blank) (0), 1 – 8

Identify the specific Keypad (CC #) where the Custom Function is entered. Only one command center can be assigned for this Sked function.

(Blank) (0)	No command center is specified for Custom Function activation.
1 – 8	command center address specified for Custom Function activation.

S## Custom Func

Default: (Blank) (0)

Selections: (Blank) (0) 128 – 131

Enter the Custom Function this Sked executes.

	(Blank) (0)		No Custom Function will be activated.
	128 – 131		Custom Function to be activated.
13		clock Day logg The	Ist Time Forward One Hour. This Sked function is used to make adjustments to the panel's k. A typical application is to program this to go into effect at 2:00 AM on the date that light Savings Time begins (during the springtime). No TIME CHANGE report is sent or ed, but the new time appears in the next report logged. The are no other parameters that require input for this option.
14		pane that <i>even</i> logg	Let Time Backward One Hour. This Sked function is used to make adjustments to the sel's clock. A typical application is to program this to go into effect at 2:00 AM on the date Daylight Savings Time ends (during the fall). This function can operate only once in a day, if multiple Skeds with this function are programmed. No TIME CHANGE report is sent or ed, but the new time appears in the next report logged.
15		com cent Sou	nd Watch Tone at Command Center. This function sounds the Watch Tone at the mand center address programmed in Parameter 1. The Watch Tone sounds at all command ers with the address programmed. Press [ESC] to silence the tone. Ind Watch Tone defines the command center address where the Watch Tone sounds. Enter specific address at the S## Cmd Center prompt.

Skeds

S## Cmd Center 1 [through 8]

Default: (Blank)

Selections: (Blank), Yes or No

Enable the Sked to beep the command center programmed Yes.

Yes	Watch tone will sound at this command center.
No	Watch tone will not sound at this command center.



RAM IV version 3.6 or higher and RADXSKED handler version 1.02 or higher must be used to program these new Skeds.

28	Expanded Off-Normal Test Report . In order to generate this event, one or more points must be
	in an off-normal state at the time the Sked executes. In addition to this, any System Trouble that
	is active also generates an Expanded Off-Normal Test Report. Expanded Off-Normal Test
	Reports include the <i>Off Normal Test Report</i> event as well as the supplementary event at the time
	the report is generated.
	However, the Event Log only shows a Test Report event.
	If none of these conditions exist at the time the Sked executes, only a Sked Executed event is
	generated and the Off-Normal Test Report is not sent.



To meet UL 985 daily test report requirements (when using two phone lines) you must still use Sked Function Code 9, Test Report and program it to occur on a daily basis as per AHJ requirements.

29	Non-Expanded Off-Normal Test Report. Non-Expanded Off-Normal Test Report events are
	only sent when any point is in the off-normal state from any area but only sends the Off Normal
	Test Report event. In addition to this, any System Trouble that is active also generates a Non-
	Expanded Off-Normal Test Report.
	However, the Event Log only shows a Test Report event.
	If none of these conditions exist at the time the Sked executes, only a Sked Executed event is generated and the Non-Expanded Off-Normal Test Report is not sent.

S## Time

Default: 00:00

Selections: HH:MM (hours and minutes)

Enter the time that the Sked executes. Make entries using a 24-hour clock (for example, 7:00 AM is entered as 07:00, 2:45 PM is entered as 14:45).

Disabled Skeds have a (Blank) time. If you copy the panel and the entry for this prompt is blank, but times were at one time programmed, the Sked may have been disabled from the command center using the CHANGE SKEDS function.

To program a time:

- 1. Press the two digits representing the hour.
- 2. The cursor advances past the colon (:) in the display.
- 3. Press the two digits representing the minutes.
- Press [ENT].

Skeds

S## Date

Default: _____

Selections: MM/DD (month and date)

Enter the date that the Sked executes.

Disabled Skeds have a (Blank) date. If you copy the panel and the entry for this prompt is blank, but dates were at one time programmed, the Sked may have been disabled from the command center using the CHANGE SKEDS function.

To program a date:

- 5. Press the two digits representing the hour.
- 6. The cursor advances past the colon (:) in the display.
- 7. Press the two digits representing the minutes.
- 8. Press [ENT].

S## Sunday

Default: No

Selections: Yes or No

This prompt, and the next six prompts, selects the days of the week that the Sked is active.

Exceptions:

To prevent the Sked from activating on certain days of the year, program *Xept Holiday* Yes, and enable at least one Holiday Index. When *Xept Holiday* is programmed Yes, the window executes on the days of the week programmed *unless the date is designated as a Holiday by the Holiday Index selected.*

If a Sked is only needed on certain days of the year, do not program the Sked to execute on any days of the week. Instead, program *Xept Holiday* No, and select a Holiday Index with the dates you want the window to be active.

Yes	Activate this Sked on Sundays.
No	Do not activate this Sked on Sundays.

S## Monday

Default: No

Selections: Yes or No

S## Tuesday

Default: No Selections: Yes or No

S## Wednesday

Default: No

Selections: Yes or No

S## Thursday

Default: No

Selections: Yes or No

S## Friday

Default: No

Selections: Yes or No

Skeds

S## Saturday

Default: No Selections: Yes or No

S## Xept Holiday

Default: No Selections: Yes or No

Yes	Prevent this Sked from operating on the Holidays identified in the specific Holiday Index(es) used with this Sked. Specific Holiday Indexes are selected in this programming section and programmed in the next programming module.
No	This Sked operates on Holidays programmed in the Holiday Index(es) used with this Sked.

If no Days of the Week are programmed, this Sked operates only on the Holidays programmed in the Holiday Index(es) used with this Sked. This Sked also operates if the Holiday falls on a day of the week that is programmed.

S## Holiday 1

Default: No Selections: Yes or No

Yes	Use Holiday Index 1 with this Sked.
No	Do not use Holiday Index 1 with this Sked.

S## Holiday 2

Default: No

Selections: Yes or No

S## Holiday 3

Default: No Selections: Yes or No

S## Holiday 4

Default: No Selections: Yes or No

Holiday Indexes

5.3 Holiday Indexes

This programming module has two sections: *Add/Change/Delete* and *View Holidays*. Use the *Add/Change/Delete* section to program the Holiday Indexes. The *View Holidays* section is a "view only" section provided for your convenience. Use *View Holidays* to review the dates programmed in the Holiday Indexes.

5.3.1 Add/Change/Delete

Use this section to program the dates for each of the Holiday Indexes. You can program up to four Holiday Indexes in the panel. Within each index, you can select up to 365 dates to be designated as Holidays.

The Holiday Indexes function independent of each other. The same day can be programmed in all four schedules. Holiday Indexes are used in programming *O/C Windows, User Access Windows*, and *SKEDS*.

Date

Default: __/_ Selections: MM/DD

This entry selects the month and day you are designating as a Holiday.

To program a date:

- 1. Press the two digits representing the month.
- 2. The cursor advances past the slash (/) in the display.
- 3. Press the two digits representing the day of the month.
- 4. Press [ENT].

To delete a date:

- 1. At the *Date* prompt, enter the month and day you want to delete and press [ENT].
- 2. Advance to the *Holiday Index* # that you want to delete the date from. Change the entry to No. Press [ENT].
- If you want the date completely removed as a Holiday, it must be programmed No for the entire Holiday Index # entries.

Holiday Index 1

Bosch Security Systems Default: No Selections: Yes or No

Yes	Use this date in Holiday Index 1.
No	Do not use this date in Holiday Index 1.

Holiday Index 2

Bosch Security Systems Default: No Selections: Yes or No

Holiday Index 3

Bosch Security Systems Default: No Selections: Yes or No

Holiday Index 4

Bosch Security Systems Default: No Selections: Yes or No

Holiday Indexes

5.3.2 View Holidays

The *View Holidays* section is a "view only" section provided for your convenience. Use *View Holidays* to review the dates you have programmed into each of the Holiday Indexes.

You can view the first 100 dates programmed in each of the indexes.

Index 1 Days

Default: (Blank)

Selections: ENTER GROUP or Down Arrow

Press ENTER GROUP to view the dates programmed in Holiday Index 1.

Press [♥] (Down Arrow Key) to advance to the next Holiday Index.

Index 2 Days

Default: (Blank)

Selections: ENTER GROUP or Down Arrow

Index 3 Days

Default: (Blank)

Selections: ENTER GROUP or Down Arrow

Index 4 Days

Default: (Blank)

Selections: ENTER GROUP or Down Arrow

SDI Automation

6.0 RADXAUX1

6.1 Introduction

The RADXAUX1 Handler is a handler for the D7212G panel that is primarily used for *programming Enhanced Communication* capabilities.

The RADXAUX1 Handler currently has six sections: SDI Automation, SDI RAM Parameters, Enhanced Communications, SDI RAM / Enhanced Communication Configuration, Miscellaneous, and Cross Point Parameters. As new features (that require new programmable prompts) are added, they will most likely be added to a new revision of this handler. To add the RADXAUX1 Handler to your D5200 Programmer, call the Bosch Systems Handler Update System at (800) 657-4584.

The term *Enhanced Communications* is used to represent the ability to provide new communication functions for the panels via the SDI Bus including the ability to:

- Route panel events to a D9133TTL-E module.
- Communicate with RAM IV using a D9133TTL-E module.
- Communicate with a remote or local head-end software package.

6.2 SDI Automation

This section allows you to define the characteristics of the D9133 Serial Interface Module when used with Home or Business Automation software. The D9133 Serial Interface Module is a bi-directional SDI to RS232 interface module that allows the panels to send/receive information to/from an external software program. This Automation protocol will allow external software programs to interact and perform functions; such as, arming and disarming areas, changing user passcodes and names, and turning relays on and off. The following items allow some simple configuration options; however, to receive the D9133 Automation protocol you must contact Bosch Security Systems Technical Support Monday through Friday 5 AM to 5 PM Pacific Time at (888) 886-6189.

Enable SDI Auto

Default: No Selections: Yes or No

Turning this item to Yes enables the automation address (SDI Address 80).

Yes	Enable Automation software.
No	Disable Automation software

Baud Rate

Default: 9600

Selections: 300, 1200, 2400, 4800, 9600, 14.4K

This item determines the baud rate between the D9133 and the external hardware connected to it. Since the SDI bus communicates at 9600 baud, Bosch Security Systems recommends that this prompt also be kept at 9600 baud. Pressing the [SPACE] bar on the D5200 toggles through the available options.

SDI Automation

Parity / Stop

Default: No / 1

Selections: No / 1, No / 2, Odd / 1, Even / 1

This prompt addresses two items; Parity and the number of Stop Bits. Pressing the [SPACE] bar on the D5200 toggles through the available options.

No / 1	No Parity, 1 Stop Bit.
No / 2	No Parity, 2 Stop Bits.
Odd / 1	Odd Parity, 1 Stop Bit.
Even / 1	Even Parity, 1 Stop Bit.

Table 40: SDI Automation Parity and Stop Bits

D9133 Supervision

Default: No Selections: Yes or No

This item determines whether the D9133 Serial Interface Module is supervised or not. If the D9133 is supervised, disconnecting the D9133 from the panel will create a TROUBLE SDI 80 event and the command center will annunciate a trouble tone (if programmed) and display SERVC SDI 80.

Note: TROUBLE SDI 80 reports are always reported using Area 1's Account number.

Yes	Supervise the D9133 Serial Interface Module.
No	Do not supervise the D9133 Serial Interface Module.

RTS Control

Default: On

Selections: On, AutoX, Off, AutoR

This item determines how the <u>Request To Send Control</u> parameters are defined for the D9133. Pressing the [SPACE] bar on the D5200 toggles through the available options.

On	Sets RTS to on (hardware control).
AutoX	Automatically enables Xon/Xoff (software control).
Off	Sets RTS off (hardware control).
AutoR	Sets this to Auto RTS.

Table 41: SDI Automation RTS Controls

DTR Control

Default: On

Selections: On, AutoD, Off

This item determines how the \underline{D} ata \underline{T} erminal \underline{R} eady Control parameters are defined for the D9133. Pressing the [SPACE] bar on the D5200 toggles through the available options.

On	Sets DTR to on (hardware control).
AutoD	Sets this to Auto DTR.
Off	Sets DTR off (hardware control).

Table 42: SDI Automation DTR Controls

SDI Automation

Status Rate

Default: 0 Selections: 0 - 255

This item determines how often the default status information is sent to the D9133 Serial Interface Module. The Status information includes:

- the current point status (normal or off-normal),
- the panel's area status (Master Armed, Master Instant Armed, Perimeter Delay Armed, Perimeter Instant Armed, Disarmed, Area Entry Delay, Perimeter Entry Delay, Area Exit Delay, Perimeter Exit Delay),
- the panel status (AC fail, battery missing, AC restore, battery low, etc.), and
- relay status (relay on or relay off).

Entries are in 100 millisecond increments. Therefore, if a 5 is entered, the Status information is sent every 500 milliseconds (or $\frac{1}{2}$ second). An entry of 10 would equal 1 second.

0	Status information never sent <i>unless requested</i> .
1 – 255*	Status information is sent at the interval programmed.

* Note: If the Status Rate is set to a value under 10 and there are 1 – 6 SDI devices connected to the system, the fastest the panel can send the Status information is approximately 1 second. In addition to this, if there are more than 6 SDI Devices connected to the panel, the fastest the panel can send the information is approximately 1½ to 2 seconds.

6.3 SDI RAM Parameters

This section allows you to configure Remote Account Manager (RAM) parameters when communicating locally with a PC, over a Local Area Network (LAN), a Wide Area Network (WAN), or the Internet. To use RAMIV locally, a Direct Connect Programming Module (D9133DC) is required. To use RAMIV over a LAN/WAN/Internet, an SDI-Ethernet Module (D9133TTL-E) is required and the PC RAMIV is installed on must have a network card. See your Information Systems' administrator for network requirements.

In addition to this, this section allows you to

- define the RAM parameters necessary to communicate via an external modem that can be connected to a D9133DC Direct Connect Programming Module or
- provide for local programming via a D9133 Serial Interface Module.

Although it is not listed in this section, RAM IV still checks for the RAM Passcode (see *RAM Parameters*), Datalock Code and the panel type to determine if this RAM session should continue.

6.3.1 User Interface Modifications for CMD 43

CMD 43 has been modified to compensate for now being able to communicate with RAM IV via a network path. Refer to *Figure 3* for CMD 43's structure.

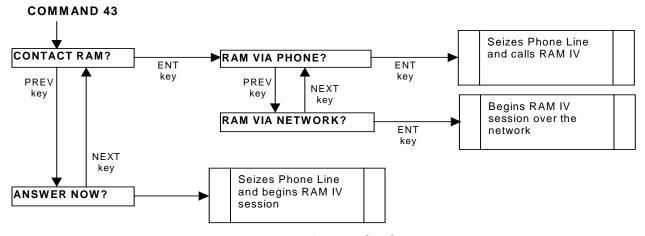


Figure 3: CMD 43 Flowchart

Pressing the [ESC] key while CONTACT RAM?, ANSWER NOW?, RAM VIA PHONE?, or RAM VIA NETWORK? is displaying will exit the user to Idle Text.

Note: The RAM VIA PHONE? prompt shown above, if selected, will contact RAM via the panel phone line and not the external modem. Users will not be able to initiate a RAM session via the external modem. If you are using an external modem, RAM sessions can only be initiated by programming Answer Armed and Answer Disarmed (to a value greater than 0) in Section 6.3 SDI RAM Parameters on page 128.

Enable SDI RAM

Default: Yes Selections: Yes or No

This item determines if the panel will allow RAM IV communications over the SDI bus. This item must be set to Yes if you plan on using the External Modem configuration, a LAN/WAN/Internet connection, or local RAM IV programming.

	· · · · · · · · · · · · · · · · · · ·	_	 	
Yes	Enable RAM sessions over the SDI bus.			
No	Do not enable RAM sessions over the SDI bus.			

Note: If the reset pin is in the locked position, local RAM IV programming is still allowed even if this prompt is set to No.



When configuring this item to allow for local programming, remember that the D9133DC must have Jumper 8 shorted, the power must be cycled after changing the address, and a serial cable is required.

Call Back Enabled

Default: No Selections: Yes or No

Using this function allows the panel, after it has verified the RAM passcode, to provide an additional level of security by ending the SDI RAM session and then reconnecting with RAM using

- a) The *RAM IP Address* (*Enable Ext Modem* must be set to No) or
- b) The RAM Dial String (Enable Ext Modem must be set to Yes)

before allowing any upload or download.

Yes	When the panel hears the proper RAM password (see <i>RAM Passcode</i> in <i>RAM Parameters</i>) it ends the SDI RAM session and then attempts to reconnect to RAM using the <i>RAM IP Address</i> if <i>Enable Ext Modem</i> is set to No. If <i>Enable Ext Modem</i> is set to Yes, the panel will attempt to re-establish communication with RAM using the <i>RAM Dial String</i> . This ensures that the panel only communicates with valid RAM units.
No	The SDI RAM session is initiated immediately; no 'call back' is required. The panel can engage in SDI RAM sessions regardless of originating location.

RAM IP Address 1

Default: 0 Selections: 0 - 255

This prompt and the next three prompts will determine the IP address for RAM IV.

An IP Address consists of four fields. Each field has a range of 0-255. As an example, an IP Address is expressed as 110.227.64.190. The D5200 programmer has split the IP Address into four programmable fields. Be sure you contact your network administrator to find out the IP Address to which the RAM IV computer is connected.

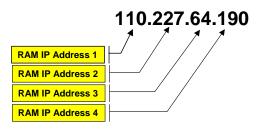


Figure 4: RAM IP Address Prompts

Note: Set this item to 0 if Enable Ext Modem is set to Yes.

0 – 255	Enter the first three digits of the IP Address. if the field is one or two digits in length,
	leading zeros are not required.

RAM IP Address 2

Default: 0 **Selections:** 0 - 255

See RAM IP Address 1.

RADXAUX1

SDI RAM Parameters

RAM IP Address 3

Default: 0

Selections: 0-255

See RAM IP Address 1.

RAM IP Address 4

Default: 0 Selections: 0 -

Selections: 0 – 255 See *RAM IP Address 1*.

6.3.2 Using an external modem

Through the use of a standard, off-the-shelf modem (capable of communicating at 9600-baud) and a D9133DC connected directly to the panel, RAM IV can communicate with a D7212G panel at speeds of up to 9600 baud.



Both the U.S.Robotics V.92 56K Modem (model # 5686, includes V.92 and V.90 56K standard technology) and the Best Data Smart One V.92/V.44 56K External Data/Fax Modem (model # 56SX-92) are recommended for use as external modems (connected to the panel) based on compatibility testing by Bosch Security Systems.

The following seven prompts help configure the requirements necessary to allow an external modem to be connected to a D7212G panel via a D9133DC. Configuring the system in this fashion now allows you to communicate with RAM IV at 9600 baud because communication is being routed through the SDI Bus.

Note 1: Bosch Security Systems strongly recommends that a separate phone line be used if an external modem is going to be connected to the panel via a D9133DC Direct Connect Programming Module. However, if it is not possible to obtain a different phone line than the panel is using, be absolutely sure that the panel is still wired in front of any premises phone and the external modem devices so that full line seizure is still maintained. In addition to this, you will want to make sure that the following items are programmed in Section 2.7 RAM Parameters on page 34 in the 9000MAIN/RAM Parameters handler as shown below:

 $Answer\ Armed = (Blank)\ or\ 0$

Answer Disarmed = (Blank) or 0

RAM Line Monitor = No

RAM Call Back = No

RAM Phone # = (Blank)

Note 2: When using an external modem, it must be pre-initialized to the following parameters using HyperTerminal on your computer. Please note that the HyperTerminal procedures may vary depending upon the Operating System used.

- 1. In Windows[®], open the HyperTerminal application within Programs, Accessories, Communications.
- 2. Connect the modem to an available Com Port.
- 3. Once connected, select the appropriate Com Port within HyperTerminal. See Figure 5 on page 131.

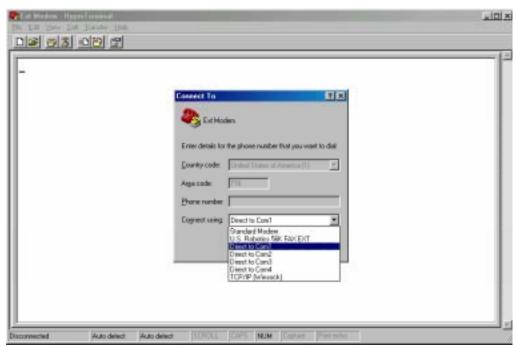


Figure 5: Com Port Selection within HyperTerminal

- 4. For Best Data Smart One V.92, type ATS37 = 9 [ENT]. For US Robotics, type AT&N6 [ENT]. This will set the Baud rate of the modem to 9600. For modems other than US Robotics or Best Data Smart One V.92, please consult your individual modem's instructions for the correct text string.
- 5. Type ATEO [ENT]. This will eliminate echo, making all user input from this point forward invisible on screen.
- 6. Type AT&W0 [ENT]. This writes the configuration to modem memory. This will save the modem profile to a file and upon disconnection or power loss.



If you are going to use an External Modem for RAM IV communications, Enhanced Communications and RAM IV functions using a D9133TTL-E are <u>disabled</u>.

The external modem is connected to the D9133DC Direct Connect Programming Module, which in turn, is connected to the SDI Bus using SDI Address 88, see *Figure 6*. A standard serial cable is required to connect the D9133DC to the external modem.

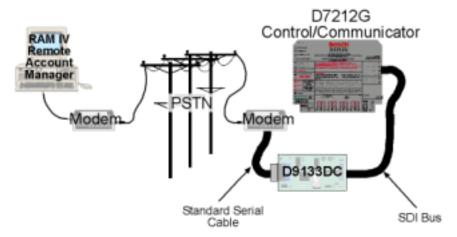


Figure 6: External Modem Connection

Note 3: In order to use an off-the-shelf external modem and a D9133DC serial module to connect to the panel via RAM, the following settings must be used:

- RADXAUX1\ENHANCED COMM\Enhanced Comm\No
- 2. RADXAUX1\SDI RAM PARAMETERS\Enable SDI RAM\Yes
- 3. RADXAUX1\SDI RAM PARAMETERS\Callback Enabled\No
- RADXAUX1\SDI RAM PARAMETERS\RAM IP Address 1-4\0
- 5. RADXAUX1\SDI RAM PARAMETERS\Enable Ext Modem\Yes
- RADXAUX1\SDI RAM PARAMETERS\Answer Armed\1 to 15
- 7. RADXAUX1\SDI RAM PARAMETERS\Answer Disarmed\1 to 15
- 8. RADXAUX1\SDI RAM PARAMETERS\RAM Line Monitor\No
- 9. RADXAUX1\SDI RAM PARAMETERS\Seize Relay\No
- 10. RADXAUX1\SDI RAM PARAMETERS\Modem Init String\ATE0
- 11. RADXAUX1\SDI RAM PARAMETERS\RAM Dial String\ (Blank)
- 12. RADXAUX1\SDIRAM/ENHANCED CONF\Baud Rate\9600
- 13. RADXAUX1\SDIRAM/ENHANCED CONF\Parity/Stop No\1
- 14. RADXAUX1\SDIRAM/ENHANCED CONF\RTS Control\ON
- 15. RADXAUX1\SDIRAM/ENHANCED CONF\DTR Control\ON
- 16. RADXAUX1\SDIRAM/ENHANCED CONF\9133 Supervision\No
- 17. 9000MAIN\PANEL WIDE PARAMETER\Enhanced Routing\RG1 Primary SDI\No
- 18. 9000MAIN\PANEL WIDE PARAMETER\Enhanced Routing\RG1 Backup SDI\No
- 19. 9000MAIN\PANEL WIDE PARAMETER\Enhanced Routing\RG2 Primary SDI\No
- 20. 9000MAIN\PANEL WIDE PARAMETER\Enhanced Routing\RG2 Backup SDI\No
- 21. 9000MAIN\PANEL WIDE PARAMETER\Enhanced Routing\RG3 Primary SDI\No
- 22. 9000MAIN\PANEL WIDE PARAMETER\Enhanced Routing\RG3 Backup SDI\No
- 23. 9000MAIN\PANEL WIDE PARAMETER\Enhanced Routing\RG4 Primary SDI\No
- 24. 9000MAIN\PANEL WIDE PARAMETER\Enhanced Routing\RG4 Backup SDI\No
- 25. The panel reset pin can be up or down.
- 26. The modem at the panel location must be set for 9600 baud and echo off. Then this info must be written to the modem configuration area. Hyperterminal can be used to send the following Hayes modem commands: (note: refer to the modem manual regarding command syntax)
- 27. ATS37=9 (set baud rate to 9600)
- 28. ATEO (eliminate echo)
- 29. AT&W0 (write configuration to modem memory) (not echoed)
- 30. Ensure the modem at RAM4 is setup for 9600 baud.
- 31. From the panel communication window on RAM, connect via modem at 9600 baud.

Enable Ext Modem

Default: No

Selections: Yes or No

Setting this item to Yes instructs the control/communicator that SDI Address 88 is enabled for use with an External Modem. For further information on Local RAM IV programming, please refer to the *RAM IV Operation Manual* (P/N: 38849).

Note:

Setting this item to Yes disables Enhanced Communication and SDI RAM for use over a Local or Wide Area Network.

Yes	Enable SDI Address 88 for use with an External Modem.
No	Disable SDI Address 88 for use with an External Modem.

Answer Armed

Default: 7 **Selections:** 0 – 15

This item determines the number of rings after which the External Modem will automatically answer a call if all areas are Master Armed.

0	No answer when all areas are Master Armed.
1-15	The panel answers the phone after the specified number of rings when all areas are Master Armed.

Answer Disarmed

Default: 7 **Selections:** 0 – 15

This item determines the number of rings after which the External Modem will automatically answer a call if any area is Perimeter Armed or Disarmed.

0	No answer when any area is Perimeter Armed or Disarmed.
0-15	The panel answers the phone after the specified number of rings when any area is Perimeter Armed or Disarmed.

RAM Line Monitor

Default: No Selections: Yes or No

This item is not yet implemented. Keep this item set to No.

Seize Relay

Default: No Selections: Yes or No

This item is not yet implemented. Keep this item set to No.

RADXAUX1

SDI RAM Parameters

Modem Init String

Default: ATE0

Selections: A – Z (caps only), 0 – 9, (SPACE), ! " # \$ % & '() * + , - . / : ; < = > ? @ [\] ^ _

This item determines what Initialization String the panel will send to the External Modem when the panel is powered up.



If special characters are required, this item can only be programmed successfully from RAM IV. The D5200 Programmer does not allow certain characters as noted above.

RAM Dial String

Default: ATDT

Selections: Not yet implemented

This item is not yet implemented.

Enhanced Communications

6.4 Enhanced Communications

Enhanced communications is the ability to communicate by some other means than the standard digital dialer. In this section, programmable parameters allow you to define up to four separate enhanced communication paths to which events can be routed. To route an event (such as an alarm or trouble) to an enhanced communication path, additional programming must also be completed in *Section 2.3 Routing* on page 16 and *Section 2.3.4 Enhanced Routing* on page 16 in the *9000MAIN* handler.

Enhanced Comm

Default: No Selections: Yes or No

This item determines if the panel will allow enhanced communications over the SDI bus.

Yes	Enable enhanced communications over the SDI bus.
No	Do not enable enhanced communications over the SDI bus.

9101 0101 Programming Modem Format must be set to Yes when using Enhanced Communications.

Enable Ext Modem must be set to No if enhanced communications are to be used.

Enhanced Comm must be set to No if External Modem is to be used.



In order to completely disable Enhanced Routing over a SDI path, RG#Primary SDI, RG#Backup SDI, and Enhanced Comm prompts must all be set to "No".

6.4.1 Programming Path #'s and IP Addresses

There are up to four available *Paths* on which events can be routed. If an event (or group of events) is to be routed to an SDI Path, the number that is entered in *Primary Device* determines which *SDI Path* will be used (as long as *RG# Prim, Primary SDI* has been set to **Yes** in *Routing* as well).

If events are going to be routed to an IP Address (in a Private Local or Wide Area Network application), determine which *Path* will be used (Path 1 – Path 4), and then enter the appropriate IP Address for that *Path* (see Path # IP Add1 to Path # IP Add4).

If events are going to be routed to an SDI Path but not to an IP Address, leave the **Path # IP Add#** set to 0. However, **Path # Poll Rate**, **Path # Ack Wait**, and **Path # Retry Count** must still be programmed.

Enhanced Communications

Path # IP Add1

Default: 0 Selections: 0 - 255

This prompt and the next 3 determine the IP Addresses for each of the four paths available when using the D5200.

An IP Address consists of four fields. Each field has a range of 0-255. As an example, an IP Address is expressed as 110.227.64.190. The D5200 programmer has split the IP Address into four programmable fields. Be sure you contact your network administrator to find out exactly which IP Address events are to be sent to.

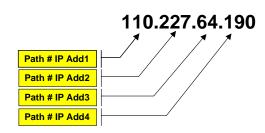


Figure 7: Path # IP Add1 to Add4

0 – 255	Enter the first three digits of the IP Address. If the first field is one or two digits in length,
	leading zeros are not required.

Path # IP Add2

Default: (

Selections: 0-255

See Path 1 IP Add1.

Path # IP Add3

Default: 0 **Selections:** 0 - 255

See Path 1 IP Add1.

Path # IP Add4

Default: 0 Selections: 0 – 255

See Path 1 IP Add1.

Path # Poll Rate

Default: 0

Selections: 0, 5 - 65535 seconds

This prompt and the next two prompts determine how the SDI Path will be supervised between the SDI device and the central station(s). This is not to be confused with the supervision of the SDI device (the connection of the SDI device to the 9000 Series Control Panel). Each SDI Path can be configured to transmit a 'heartbeat' event to the central station for supervision purposes. This is used to make sure the integrity of the connection is established at all times.



When sending reports to a Central Station Receiver via a Network Path (Primary Path), this programming prompt MUST be set to a non-zero value. Failure to program a value into this field could prevent a failed Network communications path from restoring back to normal.

In applications where both the Primary and Backup Path (see Sections 2.3 Routing and 2.3.4 Enhanced Routing on page 16) are programmed to report over an IP Address, it is recommended that the Backup IP's Address Path # Poll Rate entry be set to 0.



If the panel is going to be programmed to send "heartbeat" events to the central station, consideration must be given to the frequency. If the poll rate to the central station is less than 60 seconds, the connection with RAM IV over a Local or Wide Area Network becomes increasingly difficult the lower the poll rate is set.

Enhanced Communications



The panel readjusts the poll rate if it is less than 300 seconds to a temporary poll rate of 300 seconds when online with RAM IV. The poll rate returns to the programmed value after the RAM IV session is over.

Each time the SDI Path sends this heartbeat event, it will expect an acknowledgement back within the amount of time programmed in *Path # Ack Wait*. If the acknowledgement is not received, the panel checks to see if the *Path # Retry Count* entry is greater than 0. If so, the panel will retry the number of times programmed (in *Path # Retry Count*) to send the heartbeat event before declaring the Path as failed and generating a COMM FAIL SDI ## (Path 1 = SDI 88, Path 2 = SDI 89, Path 3 = SDI 90, Path 4 = SDI 91) event. If *Poll Rate* is programmed with a value and the Central Station does not acknowledge the Poll from the panel, Command Centers will not currently annunciate a trouble condition. To transmit this event to the central station, see *Comm Fail* in *Section 2.3 Routing* beginning on page 16.

As an example of how the "heartbeat" operates, let's say the *Path # Poll Rate* is set to 120 seconds, the *Path # Ack Wait* time is set to 10 seconds, and the *Path # Retry Count* is set to 2. In the following example when the panel first powers up, the first 'heartbeat' event for Path 1 is sent and it gets acknowledged in 1 second. 120 seconds after the first heartbeat event is sent, the second heartbeat event for Path 1 is generated and sent to the central station. To show how the Retry Count operates, we will assume that the acknowledgement is not received in 10 seconds. When this occurs, the heartbeat event is re-sent after the first 10 second ack wait period has expired. If this heartbeat event is not acknowledged, the panel declares this Path as failed (and generates the *Comm Fail ## Event*) but continues to re-send the heartbeat events every 10 seconds until it is acknowledged.

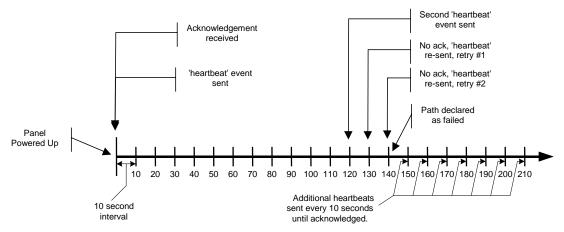


Figure 8: Poll Rate Timeline

Once the panel receives acknowledgement from the central station, the panel will then return to the normal Poll Rate (which, in this example, is 120 seconds).

If more than one SDI Path is being used, the panel will handle them on a successive basis. For example; if acknowledgement from SDI Path 1 is not received within 10 seconds (using the previous example), the panel will move to SDI Path 2 to send its heartbeat event (and subsequently wait for the ack) before returning to SDI Path 1 to re-send its heartbeat.

Entries are made in 1 second increments.

0	Disables the 'heartbeat' poll (not recommended, see last Important Note on page 136).
5 - 65535	Enables the poll rate for the amount of time programmed here.



Even though RAM IV and the D5200 allow entries of 1 – 4, the panel will interpret these as an entry of 5.



5 minutes = 300 seconds, 1 hour = 3600 seconds, 12 hours = 43,200 seconds, 18 hours = 64,800 seconds.

RADXAUX1

Enhanced Communications

Path # Ack Wait

Default: 13

Selections: 0, 5 – 65535 seconds

This item determines how long the panel will wait for an acknowledgement from the central station after a heartbeat event (poll) or an actual event has been transmitted. This prompt is only applicable to SDI transmitted events. Entries are made in 1 second increments.

0	The panel will not look for any acknowledgement from the central station.
5 – 65535	The panel will wait this amount of time to receive an acknowledgement from the central station.



Even though RAM IV and the D5200 allow entries of 1 – 4, the panel will interpret these as an entry of 5.



The value entered for Path # Ack Wait Tone <u>must not</u> be equal to the "Time Out" entry made in the RAM IV Account. Instead, offset these values by 2 or 3. For example, if your Path # Ack Wait time = 15, program your Time Out value as 17 in the RAM IV account.

Path # Retry Count

Default:

Selections: 0-255

This item determines how many times the panel will re-send the heartbeat event before declaring a Path Failure and generating a COMM FAIL RG# SDI ### ("RG #" = 1-4, "SDI ###" = 88 for Path 1, 89 for Path 2, 90 for Path 3, 91 for Path 4) event.

0	COMM FAIL RG# SDI ### events are not generated.
1 – 255	COMM FAIL RG# SDI ### events are generated after the number of retries are
	reached for a given SDI Path.

SDI RAM/Enhanced Communications Configuration

6.5 SDI RAM/Enhanced Communications Configuration

This section provides the necessary prompts needed for configuring the D9133TTL-E SDI-Ethernet Interface Module when using it for SDI RAM and/or SDI enhanced communication applications.

Baud Rate

Default: 9600

Selections: 300, 1200, 2400, 4800, 9600, 14.4K

This item determines the communication baud rate for the D9133TTL-E. Since the SDI bus communicates at 9600 baud, Bosch Security Systems recommends that this prompt also be kept at 9600 baud. Pressing the [SPACE [bar on the D5200 toggles through the available options.



Do not change this value to any other setting than 9600 baud.

Parity / Stop

Default: No / 1

Selections: No / 1, No / 2, Odd / 1, Even / 1

This prompt addresses two items: Parity and the number of Stop Bits for the D9133TTL-E. Pressing the [SPACE] bar on the D5200 toggles through the available options.

No / 1	No Parity, 1 Stop Bit.
No / 2	No Parity, 2 Stop Bits.
Odd / 1	Odd Parity, 1 Stop Bit.
Even / 1	Even Parity, 1 Stop Bit.

Table 43: Enhanced Communication Parity and Stop Bits

Note: This item must be set to No/1 when using the External Modem feature.

RTS Control

Default: On

Selections: On, AutoX, Off, AutoR

This item determines how the <u>Request <u>To Send Control</u> parameters are defined for the D9133TTL-E. Pressing the [SPACE] bar on the D5200 toggles through the available options.</u>

On	Sets RTS to on (hardware control).
AutoX	Automatically enables Xon/Xoff (software control).
Off	Sets RTS off (hardware control).
AutoR	Sets this to Auto RTS.

Table 44: Enhanced Communication RTS Controls

Note: This item must be set to On when using the External Modem feature.

SDI RAM/Enhanced Communications Configuration

DTR Control

Default: On

Selections: On, AutoD, Off

This item determines how the <u>Data Terminal Ready Control</u> parameters are defined for the D9133TTL-E. Pressing the [SPACE] bar on the D5200 toggles through the available options.

On	Sets DTR to on (hardware control).
AutoD	Sets this to Auto DTR.
Off	Sets DTR off (hardware control).

Table 45: Enhanced Communication DTR Controls

Note: This item must be set to On when using the External Modem feature.

D9133 Supervision

Default: No Selections: Yes or No

This item determines whether the D9133TTL-E is supervised or not. If the D9133TTL-E is supervised, disconnecting it from the panel will create a TROUBLE SDI 88 event and the command center will annunciate a trouble tone and display SERVC SDI 88.

Note: TROUBLE SDI 88 reports are always reported using Area 1's Account number.

Yes	Supervise the D9133TTL-E Network Interface Module.
No	Do not supervise the D9133TTL-E Network Interface Module.

Base Port Number

Default: 7700 Selections: 0 - 65535

The base port number is the port number of the cobox; e.g. 7700. This will be used in the future revision and is not needed at this time.

6.5.1 Route Group Attempts

This section determines how many times a Route Group will try the Primary destination before attempting the Backup destination should the Primary destination fail. This entry applies to both Phone numbers and IP Addresses.

RG# 1 Attempt

Default: No Selections: Yes or No

Note: This feature is not yet available with the D7212G.

Miscellaneous

6.6 Miscellaneous

Fire Supv Res Type

Default: 0 Selections: 0, 1, 2

This item determines how the panels will transmit a Fire Supervision Restoral event.

0	The panel transmits a FIRE TROUBLE RESTORE when a Fire Supervision point restores to normal.
1	The panel transmits a FIRE ALARM RESTORE when a Fire Supervision point restores to normal.
2	The panel transmits a FIRE SUPERVISION RESTORE when a Fire Supervision point restores to normal.

Table 46: Fire Supervision Restoral Events

Enable Protocol Type

Default: No Selections: Yes, No

Not required at this time. Please leave at default value

Enable Anti Replay

Default: No Selections: Yes, No

This feature is used primarily for two purposes:

Anti-Replay

Anti-replay is a strategy designed against replay attacks. This feature will prevent substitution of a panel/network interface module (NIM) solution for delivering events over a network.

A replay attack is when a "hacker" records a message that is sent over the network by Device A and replaces this message at a later time while pretending to be Device A.



If this functionality is required, you must also enable the Anti-Replay functionality in the D6600 Receiver. Please refer to the D6600 Operation and Installation Guide (P/N: 39964) for further details.

Account Identification

The D6600 Receiver can identify the NetCom accounts by either the IP Address and/or the Account Number that is received in the message sent from the control/communicator. The Account Number that is transmitted in the message will always be Area 1's Account Number. Although up to ten (10) digits may be programmed for the Account number, only eight digits will be sent in the message to the D6600 receiver.

Fire Trouble Resound

Default: 0 Selections: 0, 1, 2

This item determines if a fire trouble condition, although previously acknowledged and silenced at a command center, will automatically (locally) resound the fire trouble tone at 12:00pm, 12:00am, or not at all if the point is still in an offnormal state. Events are not generated at the time resound occurs.

0	Command centers will not re-sound the fire trouble tone.
1	Command centers will re-sound the fire trouble tone at 12:00 PM if any fire point that falls within the scope of a command center is in an off-normal condition.
2	